INDEX*
RUBBER CHEMISTRY AND TECHNOLOGY
VOLUME 72, 1999
AUTHOR INDEX†

Adams, James; see Kolinski, Andrzef (abs-F98#40) (1) 236
Ade, Harald; see Dias, Anthony J. (abs-S99#30) (4) 789
Akema, Hiroshi; see Kobayashi, Naokazu (abs-F98#15) (1) 229
Akutagawa, Keizo; see Mouri, Hiroshi (5) 960
Allen, R. D.; see Long, T. E. (abs-F98#88) (1) 250
Altman, Mark; see Stockdale, Michael (abs-S99#27) (4) 788
Alwani, Dru W.; Klapsinos, George M.; Development of V.O.C. compliant flock adhesive for EPDM weatherstrip (abs-S99#58) (4) 797
Andries, John; see Batra, Jitender (abs-F98#66) (1) 245
Antony, Prince; De, S. K.; Peiffer, D. G.; Compatibilization of ionomeric polyblends by intermolecular ionic interactions (2) 449
Arastoopour, Hamid; see Bilgili, Ecevit (abs-S99#85) (4) 805
Arinstein, A. E.; Valyberdin, V. N.; Kelly, B. M.; Kelly, K. F.; Nikol'skii, V. G.; High-temperature shear-induced multiple cracking and grinding of polymeric materials (abs-F98#41) (1) 236
Arjunan, P.; Technological compatibilization of dissimilar elastomer blends: Part I. Neoprene and ethylene-*co*-propylene rubber blends for power transmission belt applications (abs-F98#52) (1) 240
Asthana, Himanshu; Jayaraman, K.; Morphology and rheology of nylon 6–polypropylene blends with varying extents of interfacial reaction (abs-F98#61) (1) 243
Asthana, Siddhartha; Kennedy, Joseph P. New TPEs: Star-block polymers of multiple polystyrene-*b*-polyisobutylene arms radiating from a polydivinylbenzene core (abs-F98#79) (1) 247

Balazs, Anna C.; Singh, Chandralekha; Zhulina, Ekaterina; Modeling the interactions between polymers and clay surfaces through self-consistent field theory (abs-F98#75) (1) 247
Balsara, N. P.; see Lefebvre, A. A. (abs-S99#15) (4) 784
Baranwal, Krishna C.; Rogers, Jerry W.; Standley, Paul M.; Catalytic regeneration of rubber: Part I—Polychloroprene (abs-F98#39) (1) 235
Barnes, Thomas; see Kolinski, Andrzef (abs-F98#40) (1) 236
Barres, Claire; see Leblanc, Jean L. (abs-S99#70) (4) 801
Batra, Jite der; Saunders, Keith G.; Wallace, L.; Swaminathan, S.; Andries, John; New thermoplastic vulcanizates (abs-F98#66) (1) 245
Bauman, Judson T.; A theory of the elastomer stress–strain curve (abs-F98#1) (1) 225
Beardsley, K. P.; Wortmanm W. A.; Dynamic testing as a quality control tool for EPDM polymers and compounds (abs-F98#21) (1) 230
Beardsley, K. P.; see Wortman, W. A. (abs-S99#5) (4) 781
Beaucage, G.; Guo, L.; Hyeon-Lee, J.; Kinetics of morphological development in elastomer modified silica xerogels (1) 130
Beaucage, Gregory; see Pu, Zhengcai (1) 138
Bergström, Jorgen S.; Boyce, Mary C.; Mechanical behavior of particle filled elastomers (4) 633
Bernstein, Barry; see Bilgili, Ecevit (abs-S99#85) (4) 805

* The first issue of Volume 72 contains abstracts of Fall 1998 Meeting Papers. The papers are cited in the Index as (abs-F98#...) with the appropriate paper number inserted. The fourth issue of Volume 72 has abstracts from the Spring 1999 meeting. They are cited using a similar convention, i.e., (abs-S99#...). (The Fall 99 meeting abstracts will appear in Issue 1, 2000.) Complete copies of meeting papers may be obtained from the Rubber Division Library, The University of Akron, Akron, OH 44325-3907.

† Prepared by Lois W. Brock and A. B. Sullivan

Bertrand, P.; Weng, L. T.; Carbon black surface characterization by TOF-SIMS and XPS (2) 384
Bilgili, Ecevit; Arastoopour, Hamid; Bernstein, Barry; Analysis of rubber particles produced by the solid state shear extrusion pulverization process (abs-S99#85) (4) 805
Blume, Anke; Analytical properties of silica—a key for understanding silica reinforcement (abs-S99#73) (4) 802
Boerio, F. J.; Tsai, Y. M.; Kim, D. K.; Adhesion of natural rubber to steel substrates: The use of plasma polymerized polymers (1) 199
Bondon, Serge; Delaporte, Michel; Cold runner block with 32 nozzles not in straight lines (abs-S99#82) (4) 804
Bouman, Judson T.; Replacing the tearing energy parameter (abs-S99#20) (4) 786
Bovenkamp, J.; see Xiao, S. (4) 758
Boyce, Mary C.; see Bergström, Jorgen S. (4) 633
Breidt, J.; see Leisen, J. (1) 1
Breig, W. F.; Oliver, L. R.; Power steering hose composite construction and material component effects on crimping stress and pulsation noise attenuation (abs-S99#36) (4) 791
Breig, William F.; see Chandrashekhara, K. (abs-S99#54) (4) 796
Briber, R. M.; Perez-Salas, U.; Kim, H.-J.; Rafailovich, M.; Sokolov, J.; Adhesion and interfacial fracture toughness between polymer network mixtures (abs-F98#74) (1) 246
Bronjawat, Jariya; see Kawahara, Seiichi (abs-S99#17) (4) 785
Bryant, Lynn; see Keller, D. R. (abs-F98#43) (1) 237
Bulawa, Michael C.; Ravishankar, P. S.; Reduction of peroxide usage in EPDM coolant hose via polymer redesign (abs-S99#33) (4) 789
Burgoyne, M. D.; see Kostanski, L. K. (abs-F98#58) (1) 242
Burlett, D. J.; Studies of elastomer oxidation via thermal analysis (1) 165
Busfield, J. J. C.; Thomas, A. G.; Indentation tests on elastomer blocks (5) 876
Bush, Jerry; see Stockdale, Michael (abs-F98#94) (1) 251
Bushimata, Saori; see Kawahara, Seiichi (5) 844

Caldwell, J. D.; see Wortman, W. A. (abs-S99#5) (4) 781
Callais, Peter A.; see Ohm, Robert F. (abs-S99#52) (4) 795
Campion, R. P.; see Morgan, G. J. (abs-S99#56) (4) 796
Cao, N. -Z.; see Darmstadt, H. (abs-S99#71) (4) 801
Castille, M. J.; see Parikh, D. R. (abs-F98#24) (1) 231
Castner, Kenneth F.; Improved processing *cis*-1,4-polybutadiene (abs-S99#3) (4) 780
Cedillo-Garcia, Rodrigo; see Gonzalez-de los Santos, E. A. (5) 854
Celina, Mathias; see Gillen, Kenneth T. (abs-S99#67) (4) 800
Champagne, Michel F.; Huneault, Michel A.; Roux, Claudine; Reactive compatibilization of polypropylene/polyethylene terephthalate blends (abs-F98#60) (1) 243
Chandra, Hari; see Chandrasekaran, R. (abs-F98#31) (1) 233
Chandrasekaran, R.; Chandra, Hari; Truck tire retreads using MR-VK and MR-TC rubbers. (abs-F98#31) (1) 233
Chandrashekhara, K.; Sloan, Charles S.; Xu, Minjie; Breig, William F.; Oliver, Larry R.; Material non-linear analysis of V-ribbed belts (abs-S99#54) (4) 796
Chartoff, R. P.; see Sircar, A. K. (rev) (3) 513
Chasar, Dwight W.; Differences among thiuram accelerators that can affect tire durability (abs-S99#63) (4) 799
Chatterjee, M. K.; see Manna, Ajay K. (2) 398
Cho, I. S.; see Gent, A. N. (2) 253
Chookazian, Steven M.; The Emabond® process for thermoplastics assembly with specific emphasis on polyolefins and TPEs (abs-F98#93) (1) 251
Chung, David y.; see Waddell, Walter H. (abs-F98#49) (1) 239
Chung, T. C.; Lu, H. L. Hong, S.; New polyolefin elastomers containing "reactive" *p*-methylstyrene units: Preparation by metallocene catalysts (abs-F98#5) (1) 226
Chung, T. C.; Lu, H. L.; Hong, S.; New polyolefin elastomers containing "reactive" *p*-methylstyrene units: Preparation by metallocene catalysts (2) 283
Clarke, J.; Petera, J.; Modeling dispersive mixing of rubber compounds (5) 807
Colvin, H.; see Dailey, L.R. (abs-S99#13) (4) 783
Costin, Richard; Nagel, Walter; Selecting acrylic type coagents for hose and belt applications (abs-S99#53) (4) 795
Coupard, A.; see Vallat, M. F. (4) 701
Coveney, V. A.; Johnson, D. E.; Modeling of carbon black filled natural rubber vulcanizates by the standard triboelastic solid (4) 673
Croft, Thomas C.; Elastomeric compounds utilizing polymer blends for improved wire adhesion (abs-F98#63) (1) 244
Cross, J. P.; see Rabeony, M. (abs-F98#36) (1) 234
Cross, J. P.; see Rabeony, M. (5) 910
Cross, John P.; McElrath, Kenneth O.; Tse, Mun Fu; Heat, oxidative and ozone stability of BIMS/diene rubber blends (abs-S99#64) (4) 799

d'Auzac, Jean; see Sakdapipanich, Jitladda (2) 299
Dailey, L. R.; Colvin, H.; Lewandowski, L.; Senyek, M.; Johnson, E.; New emulsion SBR technology-Part II. Silica-filled model compound study (abs-S99#13) (4) 783
Darmstadt, H; Cao, N. -Z.; Pantea, D. M.; Roy, C.; Sümmchen, L.; Roland, U.; Donnet, J. -B.; Wang, T. K.; Peng, C.; Surface activity and chemistry of thermal carbon blacks (abs-S99#71) (4) 801
Datta, R. N.; Hofstraat, J. W.; Geurts, F. A. J.; Talma, A. G.; Fourier transform Raman spectroscopy for characterization of natural rubber reversion and of antireversion agents (5) 829
De Hoog, Arie J.; see Smith, F. Scott (abs-F98#25) (1) 232
De, P. P.; see Manna, Ajay K. (2) 398
De, S. K.; see Manna, Ajay K. (2) 398
De, S. K.; see Antony, Prince (2) 449
Delaporte, Michel; see Bondon, Serge (abs-S99#82) (4) 804
Deller, K.; see Meyer, J. (abs-F98#13) (1) 228
Derham, C. J.; see Morgan, G. J. (abs-S99#56) (4) 796
Dewar, John; see Keller, D. R. (abs-F98#43) (1) 237
Diao, B.; Isayev, A. I.; Levin, V. Y.; Basic study of continuous ultrasonic devulcanization of unfilled silicone rubber (1) 152
Dias, Anthony; Urquhart, Stephen G.; Ade, Harald; Smith, A. P.; Stevens, Paul; Chemically sensitive imaging of tire blends using X-ray microscopy (abs-S99#30) (4) 789
Dias, Anthony Jay; Eckman, Richard; Tailoring morphology in brominated poly(isobutylene-*co*-4-methylstyrene) blends (abs-F98#48) (1) 238
Dias, J. A.; see Rabeony, M. (abs-F98#36) (1) 234
Dias, J. A.; see Zhang, Y. (abs-F98#77) (1) 247
Dias, J. A.; see Rabeony, M. (5) 910
Dick, John S.; Sumpter, Chris A.; Ward, Brian; New effective methods for measuring processing and dynamic property performance of silicone compounds (abs-F98#10) (1) 227
Dick, John S.; Pawlowski, Henry; Moore, John; Viscous heating and reinforcement effects of different fillers using the rubber process analyzer (abs-S99#7) (4) 781
Dierkes, Wilma; Leeuw, H.; Manuel, H. J.; Tire recycling is a reality (abs-F98#56) (1) 241
Dietrich, Ulf; Hackmann, Martijn; Rieger, Berhard; A new class of thermoplastic elastic polypropenes prepared with a high activity "dual-side" zirconium catalyst (abs-F98#7) (1) 227
Ding, R.; Leonov, A. I.; An approach to chemorheology of a filled SBR compound (2) 361
Donnelly, P. J.; see Darmstadt, H. (abs-S99#71) (4) 801
Donnet, J. -B.; see Darmstadt, H. (abs-S99#71) (4) 801
Dos Reis, Henrique L. M.; Golko, Paul J.; Instrument to evaluate damage in stell belted radial truck tires (4) 792
Drobny, Jiri G.; Doing business in the former Soviet-block countries (abs-S99#87) (4) 806
Drzal, Peter L.; see Kofinas, Peter (abs-F98#51) (1) 239
Drzal, Peter L.; see Kofinas, Peter (5) 918
Duvdevani, I.; see Potluri, R. (abs-F98#50) (1) 239

Eckman, Richard; see Dias, Anthony J. (abs-F98#48) (1) 238
Edmondson, M. S.; see Parikh, D. R. (abs-F98#24) (1) 231
Elias, Michael G.; see Ploski, Walter A. (abs-F98#9) (1) 227
Eller, Robert; Role of thermoplastic elastomers in automotive recycling (abs-F98#37) (1) 235
Elspass, C. W.; see Rabeony, M. (abs-F98#36) (1) 234
Elspass, C. W.; see Rabeony, M. (5) 910
Endo, Kiyishi; Polymerization of butadiene and isoprene and copolymerization with styrene by transition metal compounds/methylaluminoxane catalysts (abs-S99#2) (4) 779
Estrin, Arkady S.; Nalepa, Raymond W.; Maleinized polybutadiene latex for fiber to rubber adhesion (abs-S99#51) (4) 795
Ewin, M.; see Long, T. E. (abs-F98#88) (1) 250

Farid, Ahmed S.; Evaluation of specialty elastomers for sealing applications (abs-S99#57) (4) 797
Farid, Ahmed S.; see Hirst, David G. (abs-S99#77) (4) 803
Fauser, Patrik; Tjell, Jens Christian; Mosbaek, Hans; Pilegaard, Kim; Quantification of tire-tread particles using extractable organic zinc as tracer (5) 969
Fraser, Cameron; Hoover, James; Wire adhesion promoter (abs-F98#27) (1) 232
French, R. N.; see Westbrook, P. A. (1) 74
Freund, B.; see Niedermeier, W. (abs-F98#28) (1) 232
Fröhlich, Joachim; see Göritz, Dietmar (5) 929
Fruh, T.; see Parg, R. (abs-S99#66) (4) 800
Fuchs, Erich; Reinartz, Klaus S.; Improvement of the crosslinking of polychloroprene (abs-F98#32) (1) 233

Fuchs, Erich; Reinartz, Klaus; How to optimize the processing of foamed rubber goods (abs-S99#22) (4) 786
Fukumori, K.; see Mouri, M. (abs-S99#84) (4) 805
Fuller, Keith N. G.; see Hirst, David G. (abs-S99#77) (4) 803
Fuller, Robert E.; Macturk, Kenneth S.; Good heat resistance, water resistance and bin storage stability in CSM hose compounds without the use of lead (abs-S99#34) (4) 790
Furuta, Isao; see Kobayashi, Naokazu (abs-F98#15) (1) 229
Fusco, James; Hoover, James; Silica dispersion aid (abs-F98#18) (1) 230

Gajewski, Dan; see Gebauer, Elke (abs-F98#28) (1) 233
Gajewski, Vincent; Adiprene® ribbon flow: A new technology for producing rolls (abs-S99#26) (4) 788
Galaska, M. L.; see Sircar, A. K. (rev) (3) 513
Garner, R. T.; see Rabeony, M. (abs-F98#36) (1) 234
Garner, R. T.; see Rabeony, M. (5) 910
Garner, Richard T.; see Lohse, David J. (abs-F98#33) (1) 234
Garner, Richard T.; see Lohse, D. J. (4) 569
Gaymans, Reinoud J.; Thermoplastic elastomers of segmented copolymers with mono disperse amide units (abs-F98#87) (1) 249
Ge, S.; see Zhang, Y. (abs-F98#77) (1) 247
Gebauer, Elke; Gajewski, Dan; A new polyester bicomponent fiber that allows a solvent free treating for power transmission belts (abs-F98#29) (1) 233
Gedeon, Barbara J.; Anisotropy in thermoplastic elastomers: Part II (abs-F98#68) (1) 245
Gent, A. N.; Cho, I. S.; Surface instabilities in compressed or bent rubber blocks (2) 253
Gent, A. N.; Elastic instabilities of inflated rubber shells Inflation, of rubber shells, elastic instabilities during (2) 253
Gerrard, David; see Padovan, Joe (2) 343
Geurts, F. A. J.; see Datta, R. N. (5) 829
Ghebremeskel, G.; see Zhao, J. (abs-S99#16) (4) 784
Ghebremeskel, G. N.; see Zhao, Junling (abs-F98#95) (1) 251
Ghebremeskel, G. N.; Westendorf, Nathan; Hendrix, Cebron; Feasibility of determining the amount of oil in styrene–butadiene type rubber by pulsed NMR spectroscopy (abs-S99#19) (4) 785
Giami, S.; see Vallat, M. F. (4) 701
Gibala, D.; Thomas, D.; Hamed, G. R.; Cure and mechanical behavior of rubber compounds containing ground vulcanizates: Part III. Tensile and tear strength (abs-F98#53) (1) 240
Gibala, D.; Thomas, D.; Hamed, G. R.; Cure and mechanical behavior of rubber compounds containing ground vulcanizates: Part III. Tensile and tear strength (2) 357
Gillen, Kenneth T.; Celina, Mathian; Keenan, Michael R.; Methods for predicting more confident lifetimes of seals in air environments (abs-S99#67) (4) 800
Glasser, Peter F.; The Moriyama Sheet Preforming Machine (abs-F98#71) (1) 246
Gogos, C. G.; see Potluri, R. (abs-F98#50) (1) 239
Golko, Paul J.; see dos Reis, Henrique L. M. (abs-S99#39) (4) 792
Gonzalez-de los Santos, Eduardo E. A.; Soriano-Corral, Florentino; Lozano-Gonzalez, Ma. Josefina; Cedillo-Garcia, Rodrigo; Devulcanization of guayule rubber by ultrasound (5) 854
Gooch, Lawrence R.; Calendering coated fabrics and tapes (abs-F98#72) (1) 246
Gordon, Jeffrey J.; Lemieux, Marvin A.; Thermoplastic elastomers for automotive applications—Past, present, and future (abs-F98#90) (1) 250
Göritz, Dietmar; Raab, Horst; Fröhlich, Joachim Maier, Peter G.; Surface structure of carbon black and reinforcement (5) 929
Gradwell, M. H.; van der Merwe, M. J; Reactions of 2-*t*-butylbenzothiazole sulfenamide with sulfur and zinc oxide in the absence of rubber (1) 55
Gradwell, M. H. S.; van der Merwe, M. J.; 2-*t*-butylbenzothiazole sulfenamide accelerated sulfur vulcanization of polyisoprene (1) 65
Graessley, William W.; see Lohse, David J. (abs-F98#33) (1) 234
Graessley, William W.; see Lohse, D. J. (4) 569
Greene, Peter K.; see Hong, Sung W. (abs-S99#65) (4) 799
Gregg, Michael J.; Synchronous drive belts using helical offset teeth (abs-S99#55) (4) 796
Grolleau, V.; see Moreau, C. (2) 269
Grosch, Karl A.; International Rubber Science Hall of Fame Inductee; Adolf Schallamach, Biography (2) G31
Guo, L.; see Beaucage, G. (1) 130

Haasnoot, J. G.; see Nieuwenhuizen, P. J. (1) 17
Haasnoot, J. G.; see Nieuwenhuizen, P. J. (1) 43
Haasnoot, Jaap G.; see Nieuwenhuizen, Peter J. (1) 015

Haberstroh, E.; see Ryzko, P. (abs-S99#6) (4) 781
Haberstroh, E.; see Krusche, A. (abs-S99#69) (4) 800
Haberstroh, Edmund; see Ronnewinkel, Christoph (abs-S99#80) (4) 804
Haberstroh, Edmund; Henze, Enno; Closed loop fuzzy control of part weight in injection molding of liquid silicone rubber (LSR) based on pvT-behavior (abs-S99#83) (4) 804
Hackman, Martijn; see Dietrich, Ulf (abs-F98#7) (1) 227
Halasa, Adel F.; see Kofinas, Peter (abs-F98#51) (1) 239
Halasa, Adel F.; New elastomers for tire applications (abs-S99#1) (4) 779
Halasa, Adel F.; see Kofinas, Peter (5) 918
Hamada, Toshiya; see Takenaka, Katsuhiko (abs-S99#4) (4) 780
Hamed, G. R.; see Gibala, D. (abs-F98#53) (1) 240
Hamed, G. R.; see Gibala, D. (2) 357
Hamed, G. R.; Zhao, J.; Tensile behavior after oxidative aging of gum and black-filled vulcanizates of SBR and NR (4) 721
Hamed, G. R.; Kim, H. J.; Cut growth in vulcanizates of natural rubber, *cis*-polybutadiene, and a 50/50 blend: Part II. Cracking patterns in the strained state (abs-S99#18) (4) 785
Hamed, G. R.; Park, B. H.; The mechanism of carbon black reinforcement of SBR and NR vulcanizates (5) 946
Hamed, G. R.; Kim, H. J.; Cut growth in vulcanizates of natural rubber, *cis*-polybutadiene, and a 50/50 blend: Part II. Cracking patterns in the strained state (5) 895
Hammouda, B.; see Lefebvre, A. A. (abs-S99#15) (4) 784
Hanada, Kayoko; see Takenaka, Katsuhiko (abs-S99#4) (4) 780
Hansen, David R.; St. Clair, David J.; Styrenic thermoplastic elastomers (abs-F98#83) (1) 249
Harmsworth, N.; Elastomers in hoses for air conditioning systems (abs-F98#45) (1) 237
Hashimoto, Chihiro; see Kawahara, Seiichi (5) 844
Hashimoto, Kinro; Toyoda, Keiji; Wada, Yoshi; Peachey, Mark; Yao, Terutaka; Polynorbornene rubber for paper feed roller application (abs-F98#44) (1) 237
Heinrich, G.; see Kaliske, M. (4) 602
Heinrich, Gert; see Klüppel, Manfred (abs-S99#43) (4) 793
Hemed, G. R.; see Norton, Craig (abs-S99#75) (4) 803
Hendrix, Cebron; see Ghbremeskel, G. N. (abs-S99#19) (4) 785
Hennig, T.; see Meyer, J. (abs-F98#13) (1) 228
Hensel, M.; see Stone, C. R. (abs-F98#19) (1) 230
Henze, Enno; see Haberstroh, Edmund (abs-S99#83) (4) 804
Heo, Gwi Suk; see Kim, Seung Wook (1) 181
Hewitt, N. L.; Adhesion systems for belts and hose (abs-S99#50) (4) 795
Hill, Marvin C.; Ouhadi, Traz; High pressure thermoplastic hose constructions utilizing thermoplastic vulcanizates (abs-F98#67) (1) 245
Hillmyer, Marc A.; Schmidt, S. C.; Design, synthesis and characterization of polyactide-containing block copolymers (abs-F98#78) (1) 247
Hippo, P. K.; see Lee, B. L. (abs-S99#38) (4) 791
Hirst, David G.; Farid, Ahmed S.; Fuller, Keith N. G.; Cut growth of SBS thermoplastic elastomers (abs-S99#77) (4) 803
Hobbie, E. K.; see Migler, K. B. (abs-S99#29) (4) 789
Hofstraat, J. W.; see Datta, R. N. (5) 829
Honda, H.; see Mouri, M. (abs-S99#84) (4) 805
Hong, S.; see Chung, T. C. (abs-F98#5) (1) 226
Hong, S.; see Chung, T. C. (2) 283
Hong, Sung W.; Greene, Peter K.; Lin, Chung-Yuan; The use of dialkyl paraphenylene diamine or 2,4,6-tris-(*N*-1,4-dimethyl pentyl-*p*-phenylene diamine) 1,3,5-triazine for a long term static ozone crack resistance in tire black sidewall (abs-S99#65) (4) 799
Hoover, James; see Fusco, James (abs-F98#18) (1) 230
Hoover, James; see Fraser, Cameron (abs-F98#27) (1) 232
Huneault, Michel A.; see Champagne, Michel F. (abs-F98#60) (1) 243
Hyeon-Lee, J.; see Beaucage, G. (1) 130

Ignatz-Hoover, Fred; Katritzky, Alan R.; Lobanov, Victor S.; Karelson, Mati; Insights into sulfur vulcanization from QSPR quantitative structure–property relationships studies (2) 318
Ignatz-Hoover, Fred; To, Byron H.; Increase truck tire durability through compound modifications (abs-S99#61) (4) 798
Iio, S.; see Murakami, K. (1) 119
Ikai, K.; see Kawazura, T. (abs-S99#72) (4) 802
Ikeda, Y.; see Murakami, K. (1) 119
Ikeda, Yuko; see Kohjiya, Shinzo (abs-S99#14) (4) 784
Isayev, A. I.; see Diao, B. (1) 152

Isayev, A. I.; see Yashin, V. V. (abs-F98#38) (1) 235
Isayev, A. I.; see Yashin, V. V. (4) 741
Isono, Yoshinobu; see Kobayashi, Naokazu (abs-F98#15) (1) 229
Ito, Masayoshi; see Yatsuyanagi, Fumito (abs-F98#14) (1) 229
Ito, Masayoshi; see Yatsuyanagi, Fumito (4) 657

Jablonowski, Thomas L.; Blends of polyurethane rubbers with conventional rubbers (abs-S99#46) (4) 794
Jacob, Jean Louis; see Sakdapipanich, Jitladda (2) 299
Janssen, P. J. P.; see Trifonova, D. (5) 862
Javni, Ivan; see Petrović, Zoran S. (abs-F98#62) (1) 243
Javni, Ivan; see Petrović, Zoran S. (4) 587
Jayaaraman, K.; see Asthana, Himanshu (abs-F98#61) (1) 243
Jayaseelan, Senthil K.; see van Ooij, Wim J. (abs-S99#60) (4) 798
Jeon, H. S.; see Lefebvre, A. A. (abs-S99#15) (4) 784
Johnson, D. E.; see Coveney, V. A. (4) 673
Johnson, E.; see Dailey, L.R. (abs-S99#13) (4) 783
Johnson, Ed.; see Lewandowski, Laurand (abs-S99#11) (4) 783
Johnson, Ted; Faster curing, low compression set, no post cure liquid, silicone rubber (abs-F98#12) (1) 228
Jones, R. H.; see Niziolek, A. W. (abs-S99#59) (4) 797

Kaidou, H.; see Kawazura, T. (abs-S99#72) (4) 802
Kaidou, Hiroyuki; see Yatsuyanagi, Fumito (abs-F98#14) (1) 229
Kaidou, Hiroyuki; see Yatsuyanagi, Fumito (4) 657
Kakubo, Takashi; see Kawahara, Seichi (1) 174
Kakubo, Takashi; see Kawahara, Seiichi (abs-S99#17) (4) 785
Kaliske, M.; Heinrich, G.; An extended tube-model for rubber elasticity: Statistical-mechanical theory and finite element implementation (4) 602
Karelson, Mati; see Ignatz-Hoover, Fred (2) 318
Katrritzky, Alan R.; see Ignatz-Hoover, Fred (2) 318
Katsumura, Yosuke; see Varghese, Siby (2) 308
Kawahara, Seichi; Kakubo, Takashi; Suzuki, Michio; Tanaka, Yasuyuki; Thermal properties and crystallization behavior of highly deproteinized natural rubber (1) 174
Kawahara, Seiichi; Kakubo, Takaski; Nishiyama, Naoyuki; Tanaka, Yasuyuki; Bronjawat, Jariya; Crystallization behavior and strength of natural rubber—skim rubber, deproteinized natural rubber and pale crepe (abs-S99#17) (4) 785
Kawahara, Seiichi; Bushimata, Saori; Sugiyama, Takashi; Hashimoto, Chihiro; Tanaka, Yasuyuki; A novel method for ^{13}C-NMR spectroscopy of polymer in emulsion: Quantitative analysis of microstructure of crosslinked polybutadiene in latex (5) 844
Kawamoto, Satomi; see Takenaka, Katsuhiko (abs-S99#4) (4) 780
Kawazoe, M.; see Kawazura, T. (abs-S99#28) (4) 788
Kawazoe, M.; see Kawazura, T. (abs-S99#72) (4) 802
Kawazura, T.; Kawazoe, M.; Nakamura, M.; Effects of block copolymer as a compatibilizer on rubber blends (abs-S99#28) (4) 788
Kawazura, T.; Yatsuysnagi, F.; Kawazoe, M.; Ikai, K.; Kaidou, H.; Carbon black treated with silica in aqueous system for tire tread compounds (abs-S99#72) (4) 802
Kee, D. De; see Xiao, S. (4) 758
Keenan, Michael; see Gillen, Kenneth T. (abs-S99#67) (4) 800
Keller, Bill; The evolution of quality management (abs-S99#8) (4) 782
Keller, D. R.; Bryant, Lynn; Dewar, John; Enhanced viscosity EVM elastomers for general purpose molded and extruded applications (abs-F98#43) (1) 237
Kelly, B. M.; see Arinstein, A. E. (abs-F98#41) (1) 236
Kelly, K. F.; see Arinstein, A. E. (abs-F98#41) (1) 236
Kelly, Kimberly; see Klingensmith, William (abs-F98#54) (1) 241
Kelm, J.; see Leisen, J. (1) 1
Kennedy, Joseph P.; see Asthana, Siddhartha (abs-F98#79) (1) 247
Kim, D. K.; see Boerio, F. J. (1) 199
KIm, H. -J.; see Briber, R. M. (abs-F98#74) (1) 246
Kim, H.; Isayev, A. I.; Continuous ultrasonic treatment of uncured and sulfur cured SBR: Effect of styrene content (abs-F98#55) (1) 241
Kim, H. J.; see Hamed, G. R. (abs-S99#18) (4) 785
Kim, H. J.; see Hamed, G. R. (5) 895
Kim, Seung Wook; Lee, Gae Ho; Heo, Gwi Suk; Identification of tackifying resins and reinforcing resins in cured rubber

(1) 181
Klapsinos, George M.; see Alwani, Dru W. (abs-S99#58) (4) 797
Klingensmith, William; Kelly, Kimberly; Morris, Irene; Nikol'skii, Vadim; Properties of synthetic rubber devulcanized using a Rodan and Rokel single screw devulcanizer (abs-F98#54) (1) 241
Klüppel, M.; Schuster, R. H.; Schaper, J.; Carbon black distribution in rubber blends: A dynamic-mechanical analysis (1) 91
Klüppel, Manfred; Heinrich, Gert; Rubber friction on self-affine road tracks (abs-S99#43) (4) 793
Kobayashi, Naokazu; Furuta, Isao; Akema, Hiroshi; Isono, Yoshinobu; The comparison between silica and carbon black loaded compounds as a tire tread in terms of time–temperature superposition of loss tangent (abs-F98#15) (1) 229
Koenig, Jack L.; see Oh, Sung Joon (2) 334
Kofinas, Peter; Drzal, Peter L.; Halasa, Adel F.; Orientation texture and gas transport in semicrystalline block copolymer blends (abs-F98#51) (1) 239
Kofinas, Peter; Drzal, Peter L.; Halasa, Adel F.; Orientation texture and gas transport in semicrystalline block copolymer blends (5) 918
Kohjiya, S.; see Murakami, K. (1) 119
Kohjiya, Shinzo; Ikeda, Yuko; Reinforcement of general-purpose grade rubbers by silica generated in situ (abs-S99#14) (4) 784
Kolinski, A.; see Kostanski, L. K. (abs-F98#58) (1) 242
Kolinski, Andrzej; Barnes, Thomas; Schneckenburger, Michael; Adams, James; Thermo-mechanical re-activation of tire-rubber crumb (abs-F98#40) (1) 236
Koseki, Yasuaki; Lee, Moo Sung; Macosko, C. W.; Encapsulation in ternary elastomer blends (1) 109
Kowitteerawut, Tippawan; see Sakdapipanich, Jitladda T (4) 712
Kpstanski, L. K.; MacGregor, J. F.; Burgoyne, M. D.; Pattenden, T. W.; Kolinski, A.; Schneckenburger, M. J.; Physico-chemical changes during re-activation (devulcanization) of tire-rubber crumb (abs-F98#58) (1) 242
Krishnamoorti, Ramanan; see Lohse, David J. (abs-F98#33) (1) 234
Krishnamoorti, Ramanan; Thermodynamic interactions in blends of polydienes (abs-F98#34) (1) 234
Krishnamoorti, Ramanan; see Lohse, D. J. (4) 569
Krishnamoorti, Ramanan; Thermodynamic interactions in blends of polydienes (4) 580
Krukonis, Val; see Puskas, Judit E. (abs-F98#81) (1) 248
Krukonis, Val; see Puskas, Judit E. (4) 559
Krusche, A.; Haberstroh, E.; Optimization of the production of EPDM sponge rubber seals for the automotive industry (abs-S99#69) (4) 800
Ku, B. H.; see Lee, B. L. (abs-S99#38) (4) 791
Kuebler, Thomas P.; Use of two anti-reversion agents to greatly enhance compound reversion resistance (abs-F98#17) (1) 229
Kutka, Joseph J.; see Varma, Rajesh (abs-F98#91) (1) 251

Laughner, M. K.; see Parikh, D. R. (abs-F98#24) (1) 231
LeClair, S.; see Tabib-Azar, M. (abs-S99#40) (4) 792
Leblanc, Jean L.; Barres, Claire; Bound rubber: A key factor in understanding the rheological properties of uncured carbon black filled rubber compounds (abs-S99#70) (4) 801
Lee, B. L.; Hippo, P. K.; Liu, D. S.; Ku, B. H.; Damage monitoring of cord–rubber composites based on acoustic emission (abs-S99#38) (4) 791
Lee, Gae Ho; see Kim, Seung Wook (1) 181
Lee, J. H.; see Lefebvre, A. A. (abs-S99#15) (4) 784
Lee, Moo Sung; see Koseki, Yasuaki (1) 109
Lee, Moo Sung; see Koseki, Yasuaki (1) 109
Leete, Janine L.; Interlaboratory testing programs as a quality assurance tool for the rubber industry (abs-S99#9) (4) 782
Leeuw, H.; see Dierkes, Wilma (abs-F98#56) (1) 241
Lefebvre, A. A.; Lee, J. H. Jeon H. S. Balsara, N. P. Hammouda, B.; Nucleation in polymer mixtures (abs-S99#15) (4) 784
Leicht, Douglas C.; Determining energy of rubber cylinders using FEA (abs-S99#37) (4) 791
Leisen, J.; Breidt, J.; Kelm, J.; 1H-NMR relaxation studies of cured natural rubbers with different carbon black fillers (1) 1
Lemieux, Marvin A.; see Gordon, Jeffrey J. (abs-F98#90) (1) 250
Leonov, A. I.; see Ding, R. (2) 361
Levin, V. Y.; see Diao, B. (1) 152
Lewandowski, L.; see Dailey, L.R. (abs-S99#13) (4) 783
Lewandowski, Laurand; Sibbald, Morgan; Johnson, Ed; Mallamaci, Mike; New emulsion SBR technology—Part I. Raw polymer study (abs-S99#11) (4) 783
Li, Z.; see Zhang, Y. (abs-F98#77) (1) 247
Liao, Jun; see Sundararaj, Uttendaraman (abs-F98#59) (1) 242
Lin, Chung-Yuan; see Hong, Sung W. (abs-S99#65) (4) 799
Lin, M.; see Rabeony, M. (abs-F98#36) (1) 234

Lin, M.: see Zhang, Y. (abs-F98#77) (1) 247
Lin, M.: see Rabeony, M. (5) 910
Lindsley, Ned: see Padovan, Joe (2) 343
Lion, Alexander: Strain-dependent dynamic properties of filled rubber: A non-linear viscoelastic approach based on structural variables (2) 419
Liu, D. S.: see Lee, B. L. (abs-S99#38) (4) 791
Liu, H. S.: Mead, J. L.; Stacer, R. G.; Environmental effects of recycled rubber in light fill applications: Evaluation of existing literature (abs-S99#86) (4) 806
Liu, Y.: see Zhang, Y. (abs-F98#77) (1) 247
Lobanov, Victor S.: see Ignatz-Hoover, Fred (2) 318
Lohse, David J.: Garner, Richard T.; Graessley, William W.; Krishnamoorti, Ramanan; Miscibility of blends of saturated hydrocarbon elastomers. (abs-F98#33) (1) 234
Lohse, David J.: Garner, Richard T.; Graessley, William W.; Krishnamoorti, Ramanan; Miscibility of blends of saturated hydrocarbon elastomers (4) 569
Long, T. E.; Long, V. K.; Urankar, E. J.; Sorriero, L. J.; Ewin, M.; Allen, R. D.; Synthesis of polyester graft copolymers: Introduction of acrylic (PMMA) and ethylene–propylene (EPR) branches via the macromonomer technique (abs-F98#88) (1) 250
Long, V. K.: see Long, T. E. (abs-F98#88) (1) 250
Lozano-Gonzalez, Ma. Josefina: see Gonzalez-de los Santos, E. A. (5) 854
Lu, H. L.: see Chung, T. C. (abs-F98#5) (1) 226
Lu, H. L.: see Chung, T. C. (2) 283
Luginsland, Hans-Detlef: Reactivity of the sulfur functions of the disulfane silane TESPD and the tetrasulfane silane TESPT (abs-S99#74) (4) 802
Luo, Shen-Li; Taban, Faruk; Deformation of laminated elastomer composites (1) 212
Luo, Shijian; van Ooij, Wim J. Mader, Edith; Mai, Karsten; Surface modification of textile tire cords by plasma polymerization for improvement of rubber adhesion (abs-S99#62) (4) 798

Ma, Jinjing: Block copolymer molecular structure design for improved pressure sensitive adhesive performance (abs-F98#82) (1) 248
MacGregor, J. F.: see Kostanski, L. K. (abs-F98#58) (1) 242
Macturk, Kenneth S.: see Fuller, Robert E. (abs-S99#34) (4) 790
Mader, Edith: see Luo, Shijian (abs-S99#62) (4) 798
Mai, Karsten: see Luo, Shijian (abs-S99#62) (4) 798
Maier, Peter G.: see Göritz, Dietmar (5) 929
Makuuchi, Keizo: see Varghese, Siby (2) 308
Mallamaci, Mike: see Lewandowski, Laurand (abs-S99#11) (4) 783
Mandelkern, Leo: Biography for James E. Mark, Charles Goodyear Medalist—1999, (3) G49
Manna, Ajay K.: De, P. P.; Tripathy, D. K.; De, S. K.; Chatterjee, M. K.; Effect of surface oxidation of carbon black on its bonding with epoxidized natural rubber in the presence of silane coupling agent (2) 398
Manuel, H. J.: see Dierkes, Wilma (abs-F98#56) (1) 241
Manuel, H. J.: see Verbruggen, M. A. L. (abs-F98#57) (1) 242
Manuel, H. J.: see Verbruggen, M. A. L. (4) 731
Mark, James E.: Yuan, Q. Wendy (abs-F98#11) (1) 228
Mark, James E.: (rev) (3) 465
Mark, James E.: see Pu, Zhengcai (1) 138
Martin, M.: see Varma, Rajesh (abs-F98#91) (1) 251
Matsushita, M.: see Mouri, M. (abs-S99#84) (4) 805
McAfee, E. Ray: A new liquid carbodiimide hydrolytic stabilizer for ester polyurethanes (PU) and thermal plastic polyurethanes (TPU) (abs-S99#47) (4) 794
McElrath, K. O.: see Rabeony, M. (abs-F98#36) (1) 234
McElrath, K. O.: see Tse, Mun F. (abs-F98#46) (1) 238
McElrath, K. O.: see Zhang, Y. (abs-F98#77) (1) 247
McElrath, K. O.: see Rabeony, M. (5) 910
McElrath, K.O.: see Potluri, R. (abs-F98#50) (1) 239
McElrath, Kenneth O.: see Cross, John P. (abs-S99#64) (4) 799
McGrath, James E.: An overview/review of thermoplastic elastomers (abs-F98#64) (1) 244
Mead, J. L.: see Xu, R. (abs-S99#78) (4) 803
Mead, J. L.: see Liu, H. S. (abs-S99#86) (4) 806
Means, Jeffrey D.: Chemlok® adhesives for the rubber roll industry (abs-S99#24) (4) 787
Meinecke, Eberhard A.: see Metlikovič, Peter (rev) (3) 484
Metlikovič, Peter: Meinecke, Eberhard A.; Stresses, slip and abrasion of rubber covered conveyor rollers (rev) (3) 484
Meyer, J.: Hennig, T.; Deller, K.; Schachtely, U.; Scholz, M.; AEROSIL® R 8200—A fumed silica with high reinforcing

and particularly low thickening properties (abs-F98#13) (1) 228
Migler, K. B.; Hobbie, E. K.; Qiao, F.; In situ visualization of polymer blends processing: Influence of viscosity ratio and surfaces (abs-S99#29) (4) 789
Mitchell, Julian M.; Ethylene–propylene polymer selection and compound considerations for chloramine resistance (abs-F98#23) (1) 231
Monthey, Steve; The influence of carbon blacks on the extrusion operation (abs-S99#35) (4) 790
Moore, John; see Dick, John S. (abs-S99#7) (4) 781
Moore, John; Successful use of high hardness compounds in papermill roll covers (abs-S99#25) (4) 787
Moreau, C.; Thuillier, S.; Rio, G.; Grolleau, V.; The mechanical behavior of a slightly compressible rubber-like material: Correlation of simulations and experiments (2) 269
Morgan, G. J.; Campion, R. P.; Derham, C. J.; Stress-induced phenomena in elastomers, and their influence on design and performance of O-rings (abs-S99#56) (4) 796
Morris, Irene; see Klingensmith, William (abs-F98#54) (1) 241
Mosbaek, Hans; see Fauser, Patrik (5) 969
Mott, P. H.; Roland, C. M.; Ozone detection by crack-induced opacity in rubber (4) 769
Mouri, Hiroshi; Akutagawa, Keizo; Improved tire wet traction through the use of mineral fillers (5) 960
Mouri, M.; Sato, N.; Okamoto, H.; Matsushita, M.; Fukumori, K.; Honda, H.; Nakashima, K.; Suzuki, Y.; Owaki, M.; New continuous recycling technology for vulcanized rubbers (abs-S99#84) (4) 805
Mowdood, S. K.; see Tabib-Azar, M. (abs-S99#40) (4) 792
Murakami, K.; Osanai, S.; Shigekuni, M.; Iio, S.; Tanahashi, H; Kohijya, S.; Ikeda, Y.; Silica and silane coupling agent for in situ reinforcement of acrylonitrile–butadiene rubber (1) 119

Nakajima, N.; Varkey, J.; Polar association in polyethylacrylate observed at small shear and large elongation: Effect of concentration of polar solvent (abs-F98#22) (1) 231
Nakamura, M.; see Kawazura, T. (abs-S99#28) (4) 788
Nakashima, K.; see Mouri, M. (abs-S99#84) (4) 805
Nalepa, Raymond W.; see Estrin, Arkady S. (abs-S99#51) (4) 795
Neilsen, J. G.; see Niziolek, A. W. (abs-S99#59) (4) 797
Neuhaus, Ted; Automatic X-ray inspection for the tire industry (abs-S99#42) (4) 793
Newman, John W.; Advanced shearographic tire inspection (abs-S99#44) (4) 793
Nguyen, D.; see Zhang, Y. (abs-F98#77) (1) 247
Nicholson, David W.; Predictive fracture mechanics for tires (abs-S99#41) (4) 792
Niedermeier, W.; Freund, B.; Nano-structure blacks: A new carbon black family designed to meet truck tire performance demands (abs-F98#28) (1) 232
Nieuwenhuizen, P. J.; Van Veen, J. M.; Haasnoot, J. G.; Reedijk, J.; Homogeneous zinc (II) catalysis in accelerated vulcanization III. Degradation modes of mono- and disulfidic cross-links (1) 27
Nieuwenhuizen, P. J.; van Veen, J. M.; Haasnoot, J. G.; Reedijk, J.; Homogeneous zinc (II) catalysis in accelerated vulcanization IV. The mechanism of cross-link (de)sulfuration (1) 43
Nieuwenhuizen, Peter; Haasnoot, Jaap G.; Reedijk, Jan; Homogeneous zinc (II) catalysis in accelerated vulcanization II. (Poly)olefin oxidation, dehydration, and reaction with anti-reversion coagents (1) 15
Nikol'skii, V. G.; Arinstein, A. E. (abs-F98#41) (1) 236
Nikol'skii, Vadim; see Klingensmith, William (abs-F98#54) (1) 241
Nishiyama, Naoyuki; see Kawahara, Seiichi (abs-S99#17) (4) 785
Niziolek, A. W.; Jones, R. H.; Neilsen, J. G.; Influence of compounding materials on tire durability (abs-S99#59) (4) 797
Noordemeer, J.; see Vroomen, G. (abs-F98#42) (1) 236
Noordermeer, J. W. M.; see Verbruggen, M. A. L. (abs-F98#57) (1) 242
Noordermeer, J. W. M.; see Verbruggen, M. A. L. (4) 731
Noordermeer, J. W. M.; see Trifonova, D. (5) 862
Norley, Narka O.; Enhanced mixing in the intermeshing batch mixer (abs-F98#70) (1) 245
Norton, Craig; Hamed, G. R.; Fracture of tensile specimens containing spherical rubber inclusion (abs-S99#75) (4) 803
Oh, Sung Joon; Koenig, Jack L.; Studies of peroxide curing of *cis*-1,4-polyisoprene/diallyl phthalate blends by spectroscopic techniques (2) 334

Ohm, Robert F.; Callais, Peter A.; Cure systems and antidegradant packages for hose and belt polymers (abs-S99#52) (4) 795
Okamoto, H.; see Mouri, M. (abs-S99#84) (4) 805
Oliva, Leone; see Pellecchia, Claudio (abs-F98#6) (1) 226
Oliva, Leone; see Pellecchia, Claudio (rev) (3) 553
Oliver, L. R.; see Breig, W. F. (abs-S99#36) (4) 791
Oliver, Larry R.; see Chandrashekhara, K. (abs-S99#54) (4) 796
Orroth, S. A.; see Xu, R. (abs-S99#78) (4) 803

Osanai, S.; see Murakami, K. (1) 119
Ouhadi, Traz; see Hill, Marvin C. (abs-F98#67) (1) 245
Owaki, M.; see Mouri, M. (abs-S99#84) (4) 805

Padovan, Joe; Prasad, Neelesh; Gerrard, David; Park, S. W.; Lindsley, Ned; Topology of wear particles (2) 343
Pantea, D. M.; Darmstadt, H. (abs-S99#71) (4) 801
Parg, R.; Fruh, T.; Improvement of black filler dispersion in NBR and EPDM compound using processing promoters (abs-S99#66) (4) 800
Parikh, D. R.; Laughner, M. K.; Edmondson, M. S.; Vara, R.; Castille, M. J.; Influence of molecular structure on solid state and viscoelastic behavior of ethylene elastomers (abs-F98#24) (1) 231
Parikh, D. R.; see Varma, Rajesh (abs-F98#91) (1) 251
Park, B. H.; see Hamed, G. R. (5) 946
Park, S. W.; see Padovan, Joe (2) 343
Paschke, Edward E.; Structure/property relationships for thermoplastic polyesters containing aromatic dicarboxylic acids (abs-F98#86) (1) 249
Pattenden, T. W.; see Kostanski, L. K. (abs-F98#58) (1) 242
Pattern, Wayne; see Puskas, Judit E. (abs-F98#81) (1) 248
Pattern, Wayne; see Puskas, Judit E. (4) 559
Pawlowski, Henry; see Dick, John S. (abs-S99#7) (4) 781
Peachey, Mark; see Hashimoto, Kinro (abs-F98#44) (1) 237
Peasely, J.; see Zhao, J. (abs-S99#16) (4) 784
Peasley, J.; see Zhao, Junling (abs-F98#95) (1) 251
Peiffer, D.; see Sokolov, Jonathan (abs-F98#76) (1) 247
Peiffer, D.; see Zhang, Y. (abs-F98#77) (1) 247
Peiffer, D. G.; see Antony, Prince (2) 449
Peiffer, D. G.; see Rabeony, M. (5) 910
Pellecchia, Claudio; Oliva, Leone; Ethylene–styrene copolymerization (abs-F98#6) (1) 226
Pellecchia, Claudio; Oliva, Leone; Ethylene–styrene copolymerization (rev) (3) 553
Peng, C. H.; see Darmstadt, H. (abs-S99#71) (4) 801
Perez-Salas, U.; see Briber, R. M. (abs-F98#74) (1) 246
Petera, J.; see Clarke, J. (5) 807
Petrović, Zoran S; Javni, Ivan; Shull, Jonathan; Waddon, Alan; Phase behavior and properties of polyurethane–PVC blends and fibers (abs-F98#62) (1) 243
Petrović, Zoran S.; Javni, Ivan; Shull, Jonathan; Waddon, Alan; Phase behavior and properties of polyurethane–PVC blends and fibers (4) 587
Pfeiffer, D. G.; see Rabeony, M. (abs-F98#36) (1) 234
Pilegaard, Kim; see Fauser, Patrik (5) 969
Ploski, Walter A.; Elias, Michael G.; Co-rotating twin-screw extruders for compounding adhesives and sealants (abs-F98#9) (1) 227
Potluri, R.; Gogos, C. G.; Duvdevani, I.; McElrath, K.O.; Study of mixing and morphology development of brominated isobutylene *p*-methylstyrene copolymers (BIMS), GR and carbon black (CB) blends in internal batch mixer (abs-F98#50) (1) 239
Poulter, Robert R.; see Waddell, Walter H. (abs-S99#32) (4) 789
Prasad, Neelesh; see Padovan, Joe (2) 343
Pu, Zhengcai; Mark, James E.; Beaucage, Gregory; Some attempts to force poly (dimethylsiloxane) chains through zeolite cavities to improve elastomer reinforcement (1) 138
Puskas, Judit E.; Pattern, Wayne; Wetmore, Paula M.; Krukonis, Val; Synthesis and characterization of novel multiarm-star polyisobutylene–polystyrene thermoplastic elastomer (abs-F98#81) (1) 248
Puskas, Judit E.; Pattern, Wayne; Wetmore, Paula M.; Krukonis, Val; Synthesis and characterization of novel multiarm-star polyisobutylene–polystyrene thermoplastic elastomers (4) 559

Qiao, F.; see Migler, K. B. (abs-S99#29) (4) 789

Raab, Jorst; see Göritz, Dietmar (5) 929
Rabeony, M.; Garner, R. T.; Elspass, C. W.; Pfeiffer, D. G.; Lin, M.; McElrath, K. O.; Dias, J. A.; Cross, J. P.; Phase behavior of brominated poly(isobutylene-*co*-4-methylstyrene)/general purpose rubber blends (abs-F98#36) (1) 234
Rabeony, M.; Garner, R. T.; Elspass, C. W.; Pfeiffer, D. G.; Lin, M.; McElrath, K. O.; Dias,J. A.; Cross, J. P.; Phase behavior of brominated poly(isobutylene-*co*-4-methylstyrene)/general purpose rubber blends (5) 910
Rafailovich, M.; see Briber, R. M. (abs-F98#74) (1) 246
Rafailovich, M. H.; see Zhang, Y. (abs-F98#77) (1) 247
Ravishankar, P. S.; see Bulawa, Michael C. (abs-S99#33) (4) 789

Reedijk, J.; see Nieuwenhuizen, P. J. (1) 27
Reedijk, J.; see Nieuwenhuizen, P. J. (1) 43
Reedijk, Jan; see Nieuwenhuizen, Peter J. (1) 15
Regisster, Richard A.; New materials from hydrogenated block copolymers (abs-S99#10) (4) 782
Reinartz, Klaus; see Fucks, Erich (abs-S99#22) (4) 786
Reinartz, Klaus S.; see Fuchs, Erich (abs-F98#32) (1) 233
Rio, G.; see Moreau, C. (2) 269
Rio, G.; see Moreau, C. (2) 269
Rodrigues, S.; see Sircar, A. K. (rev) (3) 513
Rogers, Jerry W.; see Baranwal, Krishna C. (abs-F98#39) (1) 235
Rogers, Martin E.; Review of the relationship between polyester melt phase chemistry and physical properties (abs-F98#84) (1) 249
Roland, C. M.; Santangelo, P. G.; Component dynamics in miscible rubber mixtures (abs-F98#35) (1) 234
Roland, C. M.; Book review: "Polymer Handbook," 4th ed., by J. Brandrup, E. H. Immergut, and E. A. Grulke (1) G10
Roland, C. M.; Book Review: "Elastomer Processing—Formulas and Tables," by Werner Kleeman and Kurt Weber (1) G10
Roland, C. M.; Book Review: "World Records in Chemistry," by H.-J Quadbeck-Seeger, R. Faust, G. Knaus and U. Siemeling (2) G28
Roland, C. M.; Book Review: "Polymers and the Environment," The Royal Society of Chemistry (2) G29
Roland, C. M.; Book Review: "The Rubber Formulary" (4) G61
Roland, U.; see Darmstadt, H. (abs-S99#71) (4) 801
Ronnewinkel, Christoph; Haberstroh, Edmund; Multi-compound injection-molding of rigid–flexible combinations made from thermoplastics, rubber and liquid-silicone rubber (abs-S99#80) (4) 804
Roux, Claudine; see Champagne, Michel F. (abs-F98#60) (1) 243
Roy, C.; see Darmstadt, H. (abs-S99#71) (4) 801
Ryzko, P.; Haberstroh, E.; Quality control of the discontinuous compounding process in a rubber internal mixer by regression and neural networks process models (abs-S99#6) (4) 781

Sakdapipanich, Jitladda; Tanaka, Yasuyuki; Jacob, Jean Louis; d'Auzac, Jean; Characterization of *Hevea brasiliensis* rubber from virgin trees: A Possible role of *cis*-polyisoprene in unexploited tree (2) 299
Sakdapipanich, Jitladda Tangpakdee; Kowitteerawut, Tippawan; Suchiva, Krisda; Tanaka, Yasuyuki; Long-chain branching and mechanism controlling molecular weight in *Hevea* rubber (4) 712
Santangelo, P. G.; see Roland, C. M. (abs-F98#35) (1) 234
Sato, N.; see Mouri, M. (abs-S99#84) (4) 805
Saunders, Keith G.; see Batra, Jitender (abs-F98#66) (1) 245
Schachtely, U.; see Meyer, J. (abs-F98#13) (1) 228
Schaper, J.; see Klüppel, M. (1) 91
Schmidt, S. C.; see Hillmyer, Marc A. (abs-F98#78) (1) 247
Schneckenburger, M. J.; see Kostanski, L. K. (abs-F98#58) (1) 242
Schneckenburger, Michael; Kolinski, Andrzef (abs-F98#40) (1) 236
Scholz, M.; see Meyer, J. (abs-F98#13) (1) 228
Schönherr, H.; see Trifonova, D. (5) 862
School, Rudy J.; Markets for thermoplastic elastomers into the new millenium (abs-F98#65) (1) 244
Schroeter, Axel; An introduction to the chemistry of polyurethane rubbers (abs-S99#45) (4) 793
Schuster, R. H.; see Klüppel, M. (1) 91
Schwarz, S. A.; see Zhang, Y. (abs-F98#77) (1) 247
Senyek, M.; see Dailey, L.R. (abs-S99#13) (4) 783
Severe, Geralda; White, James L.; Charateristic of hydrogenated acrylonitrile–butadiene rubber (abs-S99#76) (4) 803
Shelby, David; Fundamental aspects of polyester processing (abs-F98#85) (1) 249
Sherriff, Stephan F.; Accelerated compression fatigue testing, another approach (abs-F98#4) (1) 226
Shigekuni, M.; see Murakami, K. (1) 119
Shiomi, Tomoo; see Takenaka, Katsuhiko (abs-S99#4) (4) 780
Shull, Jonathan; see Petrović, Zoran S. (abs-F98#62) (1) 243
Shull, Jopnathan; see Petrović, Zoran S. (4) 587
Sibbald, Morgan; see Lewandowski, Laur (abs-S99#11) (4) 783
Singh, Chandralekha; see Balazs, Anna C. (abs-F98#75) (1) 247
Sircar, A. K.; Galaska, M. L.; Rodrigues, S.; Chartoff, R. P.; Glass transition of elastomers using thermal analysis techniques (rev) (3) 513
Sloan, Charles S.; see Chandrashekhara, K. (abs-S99#54) (4) 796
Smith, A. P.; see Dias, Anthony J. (abs-S99#30) (4) 789
Smith, F. Scott; De Hoog, Arie J.; Thiuram characterization in EPDM (abs-F98#25) (1) 232
Sokolov, J.; see Briber, R. M. (abs-F98#74) (1) 246

Sokolov, J.; see Zhang, Y. (abs-F98#77) (1) 247
Sokolov, Jonathan; Peiffer, D.; Reinforced polymer composites (abs-F98#76) (1) 247
Solis, Scott C.; see Waddell, Walter H. (abs-F98#49) (1) 239
Soriano-Corral, Florentino; see Gonzalez-de los Santos, E. A. (5) 854
Sorriero, L. J.; see Long, T. E. (abs-F98#88) (1) 250
St. Clair, David J.; see Hansen, David R. (abs-F98#783) (1) 249
Stacer, R. G.; see Xu, R. (abs-S99#78) (4) 803
Stacer, R. G.; see Liu, H. S. (abs-S99#86) (4) 806
Standley, Paul M.; see Baranwal, Krishna C. (abs-F98#39) (1) 235
Stevens, Paul; see Dias, Anthony J. (abs-S99#30) (4) 789
Stockdale, Michael; Tandon, Pat; Bush, Jerry; NBR and acrylate based tailor made TPEs (abs-F98#94) (1) 251
Stockdale, Michael; Altman, Mark; The influence of temperature on dynamic properties of NBR and XNBR vulcanizates (abs-S99#27) (4) 788
Stone, C. R.; Menting, K. -H.; Hensel, M.; New insights into the mixing process (abs-F98#19) (1) 230
Suchiva, Krisda; see Sakdapipanich, Jitladda T. (4) 712
Sugiyama, Takashi; see Kawahara, Seiichi (5) 844
Summchen, L.; see Darmstadt, H. (abs-S99#71) (4) 801
Sumpter, Chris A.; see Dick, John S. (abs-F98#10) (1) 227
Sundararaj, Uttandaraman; Liao, Jun; Miscibility and melt processing of polyetherimide blends (abs-F98#59) (1) 242
Sutton, David M.; Air-floated kaolin—Not just another filler (abs-F98#47) (1) 238
Suzuji, Michio; see Kawahara, Seichi (1) 174
Suzuki, Y.; see Mouri, M. (abs-S99#84) (4) 805
Swaminathan, S.; see Batra, Jitender (abs-F98#66) (1) 245

Taban, Faruk; see Luo, Shen-Yi (1) 212
Tabib-Azar, M.; Mowdood, S. K.; LeClair, S.; Applications of ultra-high resolution evanescent microwave imaging probe in tire and rubber measurements (abs-S99#40) (4) 792
Takenaka, Katsuhijo; Hamada, Toshiya; Kawamoto, Satomi; Hanada, Kayoko; Shiomi, Tomoo; Free-radical polymerization of 2-triethoxymethyl-1,3-butadienes and 2-triethoxysilyl-1,3-butadienes (abs-S99#4) (4) 780
Talma, A. G.; see Datta, R. N. (5) 829
Tanahashi, H.; see Murakami, K. (1) 119
Tanaka, Yasuyuki; see Kawahara, Seichi (1) 174
Tanaka, Yasuyuki; see Sakdapipanich, Jitladda (2) 299
Tanaka, Yasuyuki; see Sakdapipanich, Jitladda T. (4) 712
Tanaka, Yasuyuki; see Kawahara, Seiichi (abs-S99#17) (4) 785
Tanaka, Yasuyuki; see Kawahara, Seiichi (5) 844
Tandon, Pat; see Stockdale, Michael (abs-F98#94) (1) 251
Tang, B.; see Zhang, Y. (abs-F98#77) (1) 247
Tangpakdee; see Sakdapipanich (2) 299
Thomas, A, G.; see Busfield, J. J. C. (5) 876
Thomas, D.; see Gibala, D. (abs-F98#53) (1) 240
Thomas, D.; see Gibala, D. (2) 357
Thuillier, S.; see Moreau, C. (2) 269
Tjell, Jens Christian; see Fauser, Patrik (5) 969
To, Byron H.; see Ignatz-Hoover, Fred (abs-S99#61) (4) 798
Toyoda, Keiji; see Hashimoto, Kinro (abs-F98#44) (1) 237
Traeger, Terry L.; see Zemaitis, Robert S. (abs-S99#23) (4) 787
Trifonova, D.; Schönherr, H.; Vancso, G. J.; van der Does, L.; Noordermeer, J. W. M.; Janssen, P. J. P.; Atomic force microscopy of elastomers: Morphology, distribution of filler particles, and adhesion using chemically modified tips (5) 862
Tripathy, D. K.; see Manna, Ajay K. (2) 398
Truong, Q. T.; see Xu, R. (abs-S99#78) (4) 803
Tsai, Y. M.; see Boerio, F. J. (1) 199
Tse, Mun F.; McElrath, K. O.; Wang, H.-C.; Krishnamoorti, R.; Yureki, K.; Viscoelastic behavior of carbon black filled brominated isobutylene *p*-methylstyrene elastomer (abs-F98#46) (1) 238
Tse, Mun Fu; see Cross, John P. (abs-S99#64) (4) 799

Urankar, E. J.; see Long, T. E. (abs-F98#88) (1) 250
Urquhart, Stephen G.; see Dias, Anthony J. (abs-S99#30) (4) 789

Vara, R.; see Parikh, D. R. (abs-F98#24) (1) 231

Vahdati, Nader; Rubber constitutive models—Which one to use? (abs-S99#21) (4) 786
Vallat, M. F.; Giami, S.; Coupard, A.; Elastomer–elastomer autoadhesion-interphase gradient of elastic modulus (4) 701
Valyberdin, V. N.; see Arinstein, A. E. (abs-F98#41) (1) 236
van Duin, M.; see Verbruggen, M. A. L. (abs-F98#57) (1) 242
van Duin, M.; see Verbruggen, M. A. L. (4) 731
van Ooij, Wim J.; Jayaseelan, Senthil K.; Bonding rubber to metals by silanes (abs-S99#60) (4) 798
van Ooij, Wim J.; see Luo, Shijian (abs-S99#62) (4) 798
van Veen, J. M.; see Nieuwenhuizen, P. J. (1) 27
van Veen, J. M.; see Nieuwenhuizen, P. J. (1) 43
van der Does,; see Verbruggen, M. A. L. (4) 731
van der Does, L.; see Verbruggen, M. A. L. (abs-F98#57) (1) 242
van der Does, L.; see Trifonova, D. (5) 862
van der Merwe, M. J.; see Gradwell, M. H. S. (1) 55
van der Merwe, M. J.; see Gradwell, M. H. S. (1) 65
Vancso, G. J.; see Trifonova, D. (5) 862
Varghese, Siby; Katsumura, Yosuke; Makuuchi, Keizo; Yoshi, Fumio; Effect of water soluble polymers on radiation vulcanized natural rubber latex films (2) 308
Varkey, J.; see Nakajima, N. (abs-F98#22) (1) 231
Varma, Rajesh; Kutka, Joseph J.; Martin, M.; Parikh, D. R.; Designed processability of SBC compounds (abs-F98#91) (1) 251
Veith, Alan G.; Tread groove void and developed tread width (aspect ratio): Their joint influence on wet traction (4) 684
Verbruggen, M. A. L.; van der Does, L.; Noordermeer, J. W. M.; van Duin, M.; Manuel, H. J.; Mechanism involved in the recycling of NR and EPDM (abs-F98#57) (1) 242
Verbruggen, M. A. L.; van der Does, L.; Noordermeer, W. M.; van Duin, M.; Manuel, H. J.; Mechanisms involved in the recycling of NR and EPDM (4) 731
Vroomen, G.; Noordermeer, J.; Wilms, M.; Automotive coolant hose technology, Keltan® EPDM, peroxide curing (abs-F98#42) (1) 236

Wada, Yoshi; see Hashimoto, Kinro (abs-F98#44) (1) 237
Waddell, Walter; Poulter, Robert R.; Phase Mixing of brominated isobutylene-*co-para*-methylstyrene with precipitated silica to enhance the properties of a tire tread compund (abs-S99#32) (4) 789
Waddell, Walter H.; Chung, David Y.; Solis, Scott C.; Effects of brominated isobutylene-*co-para*-methylstyrene structure on the properties of a tire black sidewall compound (abs-F98#49) (1) 239
Waddon, Alan; see Petrović, Zoran S. (abs-F98#62) (1) 243
Waddon, Alan; see Petrović, Zoran S. (4) 587
Wallace, L.; see Batra, Jitender (abs-F98#66) (1) 245
Wang, H.-C; see Tse, Mun F. (abs-F98#46) (1) 238
Wang, Meng-Jiao; The role of filler networking in dynamic properties of filled rubber (2) 430
Wang, T. K.; see Darmstadt, H. (abs-S99#71) (4) 801
Ward, Brian; see Dick, John S. (abs-F98#10) (1) 227
Weng, L. T.; see Bertrand, P. (2) 384
Westbrook, P. A.; French, R. N.; Elastomer swelling in mixed solvents (1) 74
Westendorf, Nathan; see Ghbremeskel, G. N. (abs-S99#19) (4) 785
Wetmore, Paula; see Puskas, Judit E. (4) 559
Wetmore, Paula M.; see Puskas, Judit E. (abs-F98#81) (1) 248
White, James L.; see Severe, Geralda (abs-S99#76) (4) 803
Wilms, M.; see Vroomen, G. (abs-F98#42) (1) 236
Wortman, W. A.; see Beardsley, K. P. (abs-F98#21) (1) 230
Wortman, W. A.; Beardsley, K. P.; Caldwell, J. D.; The manufacture of EPDM with consistent polymer and compound rheology (abs-S99#5) (4) 781

Xiao, S.; Kee, D. De; Bovenkamp, J.; Effect of gasoline contamination on the permeation of organic liquids through rubber membranes (4) 758
Xu, Minjie; see Chandrashekhara, K. (abs-S99#54) (4) 796
Xu, R.; Mead, J. L.; Orroth, S. A.; Stacer, R. G.; Truong, Q. T.; Barrier properties of thermoplastic elastomer films (abs-S99#78) (4) 803

Yao, Terutaka; see Hashimoto, Kinro (abs-F98#44) (1) 237
Yashin, V. V.; Isayev, A. I.; A model for rubber degradation under ultrasonic treatment: Part I. Acoustic cavitation in viscoelastic solid (abs-F98#38) (1) 235
Yashin, V. V.; Isayev, A. I.; A model for rubber degradation under ultrasonic treatment: Part I. Acoustic cavitation in

viscoelastic solid (4) 741
Yasnovsky, V. M.: Rheology of polymeric solutions: I. Zero shear conditions (abs-F98#26) (1) 232
Yatsuyanagi, Fumito; Kaidou, Hiroyuki; Ito, Masayoshi; Relationship between viscoelastic properties and characteristics of filler–gel in filled rubber systems (abs-F98#14) (1) 229
Yatsuyanagi, Fumito; Kaidou, Hiroyuki; Ito, Masayoshi; Relationship between viscoelastic properties and characteristics of filler–gel in filled rubber system (4) 657
Yatsuysnagi, F.; see Kawazura, T. (abs-S99#72) (4) 802
Yeoh, O. H.; Strain energy release rates for some classical rubber test pieces by finite element analysis (abs-F98#2) (1) 225
Yoshi, Fumio; see Varghese, Siby (2) 308
Yuan, Q. Wendy; see Mark, James E. (abs-F98#11) (1) 228

Zemaitis, Robert S.; Traeger, Terry L.; Rubber rollers in today's printing processes (abs-S99#23) (4) 787
Zhang, Y.; Ge, S.; Liu, Y.; Tang, B.; Rafailovich, M. H.; Sokolov, J.; Peiffer, D.; Li, Z.; Lin, M.; Dias, J. A.; McElrath, K. O.; Nguyen, D.; Schwarz, S. A.; Interfacial properties of brominated isobutylene-*co*-*p*-methylstyrene and butadiene polymers (abs-F98#77) (1) 247
Zhao, J.; see Hamed, G. R. (4) 721
Zhao, J.; Ghebremeskel, G.; Peasely, J.; A study of EPDM/SBR blends (abs-S99#16) (4) 784
Zhao, Junling; Ghebremeskel, G. N.; Peasley, J.; SBR/PVC blends with NBR as a compatibilizer (abs-F98#95) (1) 251
Zhulina, Ekaterina; see Balazs, Anna C. (abs-F98#75) (1) 247

SUBJECT INDEX*

^{13}C-NMR spectroscopy, of crossinked BR in latex, for quantitative analysis of microstructure, (5) 844

2-trialkoxysilyl-1,3-butadiene, free radical polymerization, (abs-S99#4) (4) 780

2-triethoxymethyl-1,3-butadiene, free radical polymerization, (abs-S99#4) (4) 780

77PD (dialkyl paraphenylene diamine), for long-term static ozone crack resistance of tire black sidewalls, (abs-S99#65) (4) 799

AEROSIL® R 8200, fumed silica with high reinforcing and low thickening properties, (abs-F98#13) (1) 228

AFM (Atomic force microscopy), of EPDM rubber with microdispersion of organosilane-modified silica filler, (5) 862

Abrasion rate, in conveyors, lessened by large diameter rollers, low belt tension, (3) 484

Acoustic cavitation, in viscoelastic solid, considered in model for rubber degradation under ultrasonic treatment, (abs-F98#38) (1) 235

Acoustic cavitation, in viscoelastic solids, in model for ultrasonic degradation of rubber, (4) 741

Acoustic emission studies, of damage to cord-rubber composites, (abs-S99#38) (4) 791

Acousto-Ultrasonic instrument, for evaluating damage in steel belted radial truck tires, (abs-S99#39) (4) 792

Acrylate terpolymer, for heat and UV stability, (abs-F98#94) (1) 251

Acrylic type coagent, for belt and hose, (abs-S99#53) (4) 795

Activator 73: zinc salts of C8–C10 aliphatic carboxylic acids, anti-reversion agent, (abs-F98#17) (1) 229

Adhesion promoter, for tire wire, (abs-F98#27) (1) 232

Adhesion system, for belts and hose, effect of silica and other agents on, (abs-S99#50) (4) 795

Adhesion, between polymer network mixtures, (abs-F98#74) (1) 246

Adhesion, of NR to steel with plasma polymerized acetylene primer, (1) 199

Adhesion, of filler particles and of rubber matrix, measured by AFM using chemically modified tips, (5) 862

Adhesion, of rubber to wire in reinforced hose, using polymer blends, (abs-F98#63) (1) 244

Adhesion, of textile tire cords, improved by plasma polymerization, (abs-S99#62) (4) 798

Adhesion, promoting optimum for maximum truck tire endurance, (abs-S99#61) (4) 798

Adhesive strength, of multi-compound injection molded products, (abs-S99#80) (4) 804

Adhesive, fiber-to-rubber, from maleinized BR latex, (abs-S99#51) (4) 795

Adhesive, pressure-sensitive, from block copolymers, correlating molecular parameters to properties, (abs-F98#82) (1) 248

Adhesives and sealants, compounding in co-rotating twin-screw extruders, (abs-F98#9) (1) 227

Adhesives, from stsyrenic block copolymers, (abs-F98#83) (1) 249

Adiprene® ribbon flow, for producing rolls, (abs-S99#26) (4) 788

Aggregation, of wear debris into particulate matter, (2) 343

Anti-plasticization phenomenon, in miscible rubber mixtures, using diluents of higher T_g, (abs-F98#35) (1) 234

Asphalts, modified, using styrenic block copolymers, (abs-F98#83) (1) 249

Automotive applications, of TPEs, (abs-F98#90) (1) 250

BCI-MX [1,3-bis(citraconimidomethyl)benzene], antireversion agent studied by Fourier, Raman, (5) 829

BIMS (brominated isobutylene paramethylstyrene) elastomer, black-filled, viscoelastic behavior, (abs-F98#46) (1) 238

BIMS (brominated isobutylene-*co-para*-methylstyrene), blends with NR, model to explain stability of, (abs-S99#64) (4) 799

BIMS (brominated isobutylene-*co-para*-methylstyrene), effect of structure on black sidewall tires, (abs-F98#49) (1) 239

BIMS (brominated isobutylene-*co-para*-pmethylstyrene), phase mixing with silica for tire tread, (abs-S00#32) (4) 789

BIMS [brominated poly(isobutylene-*co*-4-methylstyrene)], in blends with NR, phase behavior, (abs-F98#36) (1) 234

BIMS [brominated poly(isobutylene-*co*-4-methylstyrene)], in blends with NR, phase behavior, (5) 910

BIMS, measuring interface with BR using a unique sample holder, (abs-F98#77) (1) 247

BIMS, mixing and morphology development with rubber and carbon black in internal batch mixer, (abs-F98#50) (1) 239

*Prepared by Lois W. Brock and A. B. Sullivan

BR and IR, made using transition metal/methylaluminoxane catalysts, (abs-S99#2) (4) 779
BR, and blends with NR, cut growth study and cracking patterns, (abs-S99#18) (4) 785
BR, and blends with NR, cut growth study and cracking patterns, (5) 895
BR, catalyzed by neodymium, for tire sidewalls, (abs-S99#59) (4) 797
BR, crosslinked, in latex, quantitative analysis of microstructure through ^{13}C-NMR, (5) 844
BR, of controlled molecular weight and expanded Mooney range, using special nickel catalyst complexes, (abs-S99#3) (4) 780
BR, studying oxidation by DSC, (1) 165
Barrier properties, of thermoplastic elastomer films, (abs-S99#78) (4) 803
Belt polymers, cure systems and antidegradant package for, (abs-S99#52) (4) 795
Belting, power transmission, polyester bicomponent made without use of solvents, (abs-F98#29) (1) 233
Belts, V-ribbed, material non-linear analysis in computer simulation, (abs-S99#54) (4) 796
Belts, acrylic type coagents for, (abs-S99#53) (4) 795
Belts, adhesion system for, effect of silica, resorcinol and phenolic resins, zinc and magnesium oxides and silica, (abs-S99#50) (4) 795
Belts, synchronous drive, using helical offset teeth, (abs-S99#55) (4) 796
Bimodal distribution, of poly(dimethylsiloxane) elastomer network chains, (3) 465
Black fillers, improving dispersion in NBR and EPDM by use of processing promoters, (abs-S99#66) (4) 800
Black-filled SBR vulcanizate, ground, as additive for new SBR matrix, effect on tensile and tear strength, (2) 357
Blend morphology, of brominated poly(isobutylene-*co*-4-methylstyrene) with unsaturated general purpose elastomers, (abs-F98#48) (1) 238
Blend, of low- and high-molecular weight SBR, in silica-filled compound for tires, (abs-S99#13) (4) 783
Blending, of emulsion SBRs of high- and low-molecular weights, (abs-S99#11) (4) 783
Blends of EPDM/BR/NR, dynamic mechanical analysis of carbon black distribution in, (1) 91
Blends, of BIMS and NR, phase behavior, (5) 910
Blends, of BIMS and diene rubber, heat, oxidative and ozone stability of, (abs-S99#64) (4) 799
Blends, of BR and IR, thermodynamic interactions, (abs-F98#34) (1) 234
Blends, of BR and IR, thermodynamic interactions, (4) 580
Blends, of CR and EPM, for power transmission belting, using new compatibilizers, (abs-F98#52) (1) 240
Blends, of EPDM and SBR, effect of curing agents and mixing techniques on properties of, (abs-S99#16) (4) 784
Blends, of GPR and BIMS, with and without carbon black, mixing and morphology in Brabender mixer, (abs-F98#50) (1) 239
Blends, of NBR/CM/EP, encapsulation of components on basic matrix, (1) 109
Blends, of PIB and EPR, miscibility, (abs-F98#33) (1) 234
Blends, of PIB and EPR, miscibility, (4) 569
Blends, of PP/PET compatibilized with PP-GMA, (abs-F98#60) (1) 243
Blends, of brominated poly(isobutylene-*co*-4-methylstyrene with BR, phase behavior of, (abs-F98#36) (1) 234
Blends, of poly(etherimides) with thermoplastics and effects on miscibility and melt processing, (abs-F98#59) (1) 242
Blends, of polymers for tires, made compatible by diblock copolymers, (abs-S99#28) (4) 788
Blends, of polymers, for improved wire adhesion, (abs-F98#63) (1) 244
Blends, of polyurethanes with conventional rubbers, (abs-S99#46) (4) 794
Block copolymer blends, semicrystalline, of E/EP block polymers and low density PE and IR, shear induced morphology of, (abs-F98#51) (1) 239
Block copolymer molecular structure, and effect on properties of resulting adhesives, (abs-F98#82) (1) 248
Block copolymers, with crystallizable block, prepared from hydrogenated diene and random terpolymer, (abs-S99#10) (4) 782
Book Review: "Elastomer Processing—Formulas and Tables," by Werner Kleeman and Kurt Weber, (1) G10
Book Review: "Polymers and the Environment," The Royal Society of Chemistry, (2) G29
Book Review: "The Rubber Formulary," by P. A. Ciullo and N. Hewitt, (4) G61
Book Review: "World Records in Chemistry," by H.-J. Quadbeck-Seeger; R. Faust; G. Knaus; U. Siemeling, (2) G28
Book review: "Polymer Handbook," 4th ed., by J. Brandrup, E. H. Immergut, and E. A. Grulke, (1) G10
Bound rubber, key to understanding rheological properties of uncured black filled rubber, (abs-S99#70) (4) 801
Branching, in high-ammonia *Hevea* latex of different molecular weight, (4) 712
Brominated poly(isobutylene-*co*-4-methylstyrene), blended with unsaturated general purpose rubbers, (abs-F98#48) (1) 238
Bromobutyl polymer, for inner liners, (abs-S99#59) (4) 797

CODESSA QSAR software, for QSPR studies of sulfur vulcanization of SBR, (2) 318
CR transmission belting, recycling by catalytic regeneration, (abs-F98#39) (1) 235
CR, improvement in crosslinking using 3-methyl-thiazolidone-thione-2 (MTT), (abs-F98#32) (1) 233
CSM, formulated without lead for hose with good heat resistance, water resistance, bin storage stability, (abs-S99#34) (4) 790
CSR (Compression stress–relaxation), for predicting lifetime of seals, (abs-S99#67) (4) 800
Carbodiimide hydrolytic stabilizers, new liquid for use with polyurethanes, (abs-S99#47) (4) 794
Carbon black filled NR vulcanizate, dynamic behavior predicted through modeling, (4) 673
Carbon black fillers, effect on structure of NR vulcanizate as studied by NMR relaxation, (1) 1
Carbon black structure and surface studied by scanning probe and atomic force microscopy and by SAXS, (5) 929
Carbon black surface, studied by TOF-SIMS and XPS, (2) 384
Carbon black, distribution in rubber blends, (1) 91
Carbon black, effect of surface oxidation on bonding with epoxidized NR, (2) 398
Carbon black, nano-structure, for use in truck tires, (abs-F98#28) (1) 232
Carbon black, reinforcement of SBR and NR, mechanism of, (5) 946
Carbon black, silica-treated, for tire treads, (abs-S99#72) (4) 802
Carbon black, thermal, determining surface energy and chemistry of, (abs-S99#71) (4) 801
Carbon black, use of some new types to improve extrusion of hose, (abs-S99#35) (4) 790
Carbon black-filled BIMS, viscoelastic behavior, (abs-F98#46) (1) 238
Catalyst–polymer structure, in preparation of ethylene–styrene copolymers, (3) 553
Catalytic regeneration, of CR, (abs-F98#39) (1) 235
Cavitation model, of ultrasonic rubber devulcanization, (4) 741
Chain-length distribution, in elastomer networks for improved properties, (3) 465
cis-Polyisoprene, possible role in unexploited *Hevea brasiliensis* tree, (2) 299
Chemlok® adhesives, for rubber rollers and bonding processes used, (abs-S99#24) (4) 787
Chemorheology, of filled SBR, tracing from green to cured state, (2) 361
Chloramines (chlorine and ammonium hydroxide), resistance of EPM to, (abs-F98#23) (1) 231
Clay and polymer surfaces, modeling interaction between, (abs-F98#75) (1) 247
Closed loop fuzzy control, of part weight, in injection molding of LSR, (abs-S99#83) (4) 804
Coated fabrics and tapes, calendering, (abs-F98#72) (1) 246
Cold runner blocks, with 32 nozzles not in straight line, (abs-S99#82) (4) 804
Compatibilization, of PP/PET blends with PP-GMA, (abs-F98#60) (1) 243
Compatibilizers, for blends of CR and EPM, (abs-F98#52) (1) 240
Compounding modification, to achieve maximum truck tire endurance, (abs-S99#61) (4) 798
Compressible rubber-like material, mechanical behavior; correlation of simulations and experiments, (2) 269
Compression fatigue testing, accelerated, of fiber reinforced rubber goods, new protocol, (abs-F98#4) (1) 226
Computer simulation, in non-linear analysis of materials in V-ribbed belts, (abs-S99#54) (4) 796
Conveyor rollers, rubber covered, stresses, slip and abrasion, (3) 484
Cord–rubber composites, monitoring damage based on acoustic emission, (abs-S99#38) (4) 791
Correlation, of simulations and experiments, in mechanical behavior of slightly compressible rubber-like material, (2) 269
Cracking patterns, in strained state, for NR, BR, and blends, (5) 895
Cracking pattern, in studying cut growth of NR, BR and blends, (abs-S99#18) (4) 785
Crimping stresses, in power steering hose, (abs-S99#36) (4) 791
Crosslinking, of CR, with MTT, (abs-F98#32) (1) 233
Crystallization, in hydrogenated block copolymers, (abs-S99#10) (4) 782
Crystallization, of NR made by different procedures, (abs-S99#17) (4) 785
Cure system, for belt and hose, considered together with antidegradant system, (abs-S99#52) (4) 795
Cut growth, in NR, BR, and blends, cracking patterns in strained state, (abs-S99#18) (4) 785
Cut growth, in NR, BR, and blends, cracking patterns in strained state, (5) 895
Cut growth, of SBS termoplastic elastomers, (abs-S99#77) (4) 803

DSC (differential scanning calorimetry), for determining oxidation of BR, (1) 165
Damage, cumulative, of tire cord composites, assessed by acoustic emission study, (abs-S99#38) (4) 791
Deformation, of flexible laminates, studied by model including geometric and material nonlinearities, (1) 212
Degradation modes, of mono- and disulfidic cross-links, (1) 27
Degradation, of rubber under ultrasonic treatment, model for, (abs-F98#38) (1) 235

Deproteinized NR, crystallization behavior and strength, (abs-S99#17) (4) 785
Deproteinized NR, thermal properties and crystallization, (1) 174
Devulcanization, continuous, of silcone rubber by ultrasonics, (1) 152
Devulcanization, of coarse tire rubber crumb, by thermo-mechanical process, (abs-F98#40) (1) 236
Devulcanization, of guayule, by ultrasound, (5) 854
Devulcanized rubber, by continuous shear flow stage reactor, (abs-S99#84) (4) 805
Devulcanizing, of synthetic rubbers from bushings and bumpers, using single screw extruder, (abs-F98#54) (1) 241
Diallyl phthalate, coreagent with peroxide for curing of NR, spectroscopic studies, (2) 334
Dias, Anthony J., Sparks–Thomas Award recipient, 1999, (3) G47
Diblock polymers, as compatibilizers for rubber blends for tires, (abs-S99#28) (4) 788
Die surface, visualizing effect on immisible polymer blends during extrusion, (abs-S99#29) (4) 789
Dienes and trienes in vulcanized rubber, by oxidation and dehydration of rubber backbone, (1) 15
Dienes and trienes, made from model 1,5-polyolefins, (1) 15
Disintegration, of polymeric materials under compression and shear, new model for, (abs-F98#41) (1) 236
Dispersion, of black fillers in NBR and EPDM, improved with processing promoters, (abs-S99#66) (4) 800
Dispersion, of fillers during mixing in rubber, model for, (5) 807
Dynamic mechanical testing, as a quality control tool for EPDM polymers and compounds, (abs-F98#21) (1) 230

EP-g-MA, as compatibilizer for blends of CR and EPM, (abs-F98#52) (1) 240
EPDM sponge rubber seals, for automotive industry, optimizing manufacture of, (abs-S99#69) (4) 800
EPDM weatherstrip flock adhesive, meeting V.O.C. compliance, (abs-S99#58) (4) 797
EPDM, optimizing cell structure and surface appearance in foamed product, (abs-S99#22) (4) 786
EPDM, for coolant hose, formulated to use less peroxide, (abs-S99#33) (4) 789
EPDM, from metallocene catalyzed technology, viscoelastic behavior, (abs-F98#24) (1) 231
EPDM, manufactured with consistent rheology, (abs-S99#5) (4) 781
EPDM, mechanism of thermochemical recycling with disulfides, (abs-F98#57) (1) 242
EPDM, peroxide curing of automotive coolant hose, (abs-F98#42) (1) 236
EPDM, quality control of compounds through dynamic testing, (abs-F98#21) (1) 230
EPDM, thiuram characterization in, (abs-F98#25) (1) 232
EPDM, with modified silica fillers, studied by AFM, (5) 862
EPDM-g-Epoxy, as compatibilizer for blends of CR and EPM, (abs-F98#52) (1) 240
EPDM-g-sulfonate, as compatibilizer for blends of CR and EPM, (abs-F98#52) (1) 240
EPDM/SBR blends, effect of curing agents and mixing technques on properties of, (abs-S99#16) (4) 784
EPM, in seals and gaskets, resistance to chloramines, (abs-F98#23) (1) 231
EPR, grafted onto polyester via macromonomer technique to give optically clear, tough films, (abs-F98#88) (1) 250
ESBR (emulsion SBR), from blend of low- and high molecular weight polymers, silca-filled model compound, (abs-S99#13) (4) 783
ESBR (emulsion SBR), made by blending high-molecular and low-molecular weight elastomers, (abs-S99#11) (4) 783
EVM (ethylene–vinyl acetate) elastomers, of enhanced viscosity, for general purpose molded and extruded applications, (abs-F98#43) (1) 237
Elastic instabilities, of inflated rubber shells, (2) 253
Elasticity, rubber, extended-tube model for, (4) 602
Elastomer blocks, indentation hardness measured, (5) 876
Elastomer oxidation, studied by thermal analysis, (1) 165
Elastomer–elastomer autoadhesion, of carbon black reinforced IR, (4) 701
Elastomers, modified with silica foam for closed-pore insulants, (1) 130
Emabond® Process, for thermoplastics assembly, especially polyolefins and TPEs, (abs-F98#93) (1) 251
Environmental samples, containing tire debris, use of extractable zinc as tracer, (5) 969
Epichlorohydrin elastomers, evaluated for sealing applications in gas-distribution, (abs-S99#57) (4) 797
Epoxidized NR, effect of surface oxidation of carbon black on bonding with, (2) 398
Ethylene–styrene copolymerization, mechanism for making products from elastomeric to crystalline, (abs-F98#6) (1) 226
Ethylene–styrene copolymerization, mechanism and catalyst–polymer structure, (3) 553
Evanescent microwave probes, for characterizing sections of tires, (abs-S99#40) (4) 792
Extruders, co-rotating twin-screw, for compounding adhesives and sealants, (abs-F98#9) (1) 227
Extrusion, of hose, use of some new carbon blacks to improve, (abs-S99#35) (4) 790
Extrusion, of immiscible polymer blends, visualizing effect of viscosity ration in situ, (abs-S99#29) (4) 789

FEA (Finite element analysis), to study strain energy release rates for rubber, (abs-F98#2) (1) 225
FEA study, of energy in rubber cylinders, (abs-S99#37) (4) 791
Fatigue crack growth, seeking a better parameter for use with rubber, (abs-S99#20) (4) 786
Fatigue life, of rubber, affected by sharp creases during flexing, (2) 253
Fiber reinforced rubber goods, compression fatigue testing, accelerated, (abs-F98#4) (1) 226
Filled elastomers, mechanical behavior studied with new model, (4) 633
Filled rubber, nonlinear viscoelastic approach to strain-dependent dynamic properties, (2) 419
Filled rubber, role of filler networking, (2) 430
Filler networking, role in dynamic properties of filled rubber, (2) 430
Filler–gel, characteristics in filled rubber systems and relationship between viscoelastic properties, (abs-F98#14) (1) 229
Filler–gel, characteristics in filled rubber systems and relationship between viscoelastic properties, (4) 657
Fillers, viscous heating and reinforcement effects in rubber process analyzer, (abs-S99#7) (4) 781
Finite element analysis model, developed for constitutive model showing rubber elasticity, (abs-S99#21) (4) 786
Finite element implementation, of theory for extended-tube model for rubber elasticity, (4) 602
Finite element tire modeling, for predicting fracture mechanics in tires, (abs-S99#41) (4) 792
Foamed rubber goods, optimizing processing of, (abs-S99#22) (4) 786
Fourier transform Raman spectroscopy, for study of reversion of NR, (5) 829
Fracture, of tensile specimens containing spherical rubber inclusion, (abs-S99#75) (4) 803
Frictional force, during sliding of tires on rough tracks, determining factors in, (abs-S99#43) (4) 793

GMA (glycidyl methacrylate) grafted PP, for compatibilization of PP/PET blends, (abs-F98#60) (1) 243
Gas transport, of block copolymer membranes, changed by use of selective solvents, (abs-F98#51) (1) 239
Gas-distribution, evaluation of polyurethane and epichlorihydrin elastomers as seals, (abs-S99#57) (4) 797
Gasoline, effect on permeation of organic liquids through rubber membranes, (4) 758
Glass transition, of elastomers, using thermal analysis techniques, (3) 513
Goodyear Medal Address, 1999, (3) 465
Gradient of elastic modulus, at junction of sheets of carbon black reinforced IR, (4) 701
Ground black-filled SBR vulcanizate, as additive for new SBR matrix, effect on tensile and tear strength, (2) 357
Calendering, of coated fabrics and tapes, (abs-F98#72) (1) 246
Guayule, devulcanized by ultrasound, (5) 854

HNBR, characteristics, (abs-S99#76) (4) 803
Halobutyl elastomers, for hoses in air cnditioning systems, (abs-F98#45) (1) 237
Hevea brasiliensis, from virgin trees, analysis of gel fraction in latex, (2) 299
Hevea rubber, long-chain branching and mechanism controlling molecular weight, (4) 712
Hexaepoxi squalene, initiator for multiarm-star PIB/PS polymer, (abs-F98#81) (1) 248
Hexaepoxy squalene, initiator for synthesis of PIB-PS multi-arm star TPE, (4) 559
Hose polymers, cure systens and antidegradant packages for, (abs-S99#52) (4) 795
Hose, acrylic type coagent for, (abs-S99#53) (4) 795
Hose, adhesion system for, effect of silica, resorcinol and phenolic resins, zinc and magnesium oxides and silica, (abs-S99#50) (4) 795
Hose, automotive coolant, EPDM, peroxide curing of, (abs-F98#42) (1) 236
Hose, high pressure, made of TPVs, (abs-F98#67) (1) 245
Hoses, for air conditioning systems, halobutyl type, (abs-F98#45) (1) 237
Hydrogenated semicrystalline block polymers, effect on blend miscibility, (abs-S99#10) (4) 782
Hydrotalcite, used instead of lead, in CSM compounds for hose with good heat and water resistance, (abs-S99#34) (4) 790

IIR seals, predicting lifetime by use of CSR, (abs-S99#67) (4) 800
IR, sulfur vulcanization accelerated by TBBS, (1) 65
Ignatz-Hoover, Frederick, new editor of *Rubber Chemistry and Technology*, (5) G64
Indentation tests, on elastomer blocks, (5) 876
Inflated rubber shells, elastic instabilities, (2) 253
Injection molding, of rigid–flexible combinations of TPEs, rubber and LSR, (abs-S99#80) (4) 804
Injection speed, influence on physical properties of TPEs, (abs-F98#68) (1) 245
Injection system, using new cold runner blocks having 32 nozzles not in a straight line, (abs-S99#82) (4) 804
Interfacial energy, effect on morphology of ternary blends, (1) 109

Interfacial fracture toughness, between polymer network mixtures, (abs-F98#74) (1) 246
Interlaboratory testing program, quality assurance tool for rubber industry, (abs-S99#9) (4) 782
Intermeshing rotors, with higher fill factor and productivity, for enhanced mixing, (abs-F98#70) (1) 245
Internal mixer, for rubber, control of discontinuous compounding by regression models, (abs-S99#6) (4) 781
International Rubber Science Hall of Fame Inductee, Adolf Schallamach, (2) G31
Ionomeric polyblends, based on Zn-XNBR and Zn-EMA, (2) 449
Isayev, Avraam I., Melvin Mooney Distinguished Technology Award recipient, 1999, (3) G45

Kaolin, air-floated, filler for elastomers, (abs-F98#47) (1) 238

LSR (Liquid Silicone Rubber), injection molded with TPEs and rubber, (abs-S99#80) (4) 804
LSR, injection molding, using closed loop fuzzy control of part weight, (abs-S99#83) (4) 804
Laminated elastomer composites, deformation studied by 2-D constitutive equations, (1) 212
Linear partition swelling model for elastomers, and modification in cases of mixed solvents, (1) 74
Long-chain branching, and mechanism controlling molecular weight in NR, (4) 712

MOPAC AMI semiempirical calculations, for QSPR study of sulfur vulcanization of SBR, (2) 318
MTT (3-methyl-thiazolidone-thione-2), for crosslinking CR, (abs-F98#32) (1) 233
Mackey, Donald E., Rubber Division Chairman, 1999, (1) G2
Maleinized BR latex, for fiber-to-rubber adhesive, (abs-S99#51) (4) 795
Mark, James E., Charles Goodyear Medalist, 1999, biography, (3) G49
Mechanical behavior, of particle filled elastomers, studied with new model, (4) 633
Melt phase chemistry, of polyesters as related to physical properties, (abs-F98#84) (1) 249
Melt viscosity, effect on morphology of ternary blends, (1) 109
Membranes, rubber, effect of gasoline on permeation of organic liquids through, (4) 758
Metallocene catalysis, for production of new EPDM elastomers, (abs-F98#24) (1) 231
Metallocene catalysts, for making polyolefin elastomers containing reactive *p*-methylstyrene units, (abs-F98#5) (1) 226
Metallocene catalysts, for preparation of polyolefin elastomers containing reactive *p*-methylstyrene units, (2) 283
Methylaluminoxane catalyst, with transition metal, for polymerizing BR, IR, SBR and SIR, (abs-S99#2) (4) 779
Mineral fillers, for improving wet traction of tires, (5) 960
Miscibility, of blends of saturated hydrocarbon elastomers, e.g., PIB and EPR, (abs-F98#33) (1) 234
Miscibility, of blends of saturated hydrocarbon elastomers, e.g., PIB and EPR, (4) 569
Miscibilityand melt processing, of polyetherimide blends, (abs-F98#59) (1) 242
Mixing and morphology development, of BIMS with rubber and carbon black in internal batch mixer, (abs-F98#50) (1) 239
Mixing, in the intermeshing batch mixer, (abs-F98#70) (1) 245
Mixing, of fillers during dispersion in rubber, modelng, (5) 807
Mixing, of silica-filled SSBR/BR blends for passenger tires, influence of stearic acid, (abs-F98#19) (1) 230
Model, based on amplification of first strain invariant, for mechanical behavior of filled elastomers, (4) 633
Model, extended-tube, for rubber elasticity, statistical-mechanical theory and implementation, (4) 602
Modeling, of dispersive mixing in rubber compounds, (5) 807
Modeling, of carbon black filled NR vulcanizate, by standard triboelastic solid, (4) 673
Models, for rubber elasticity, comparison and development of constitutive version, (abs-S99#21) (4) 786
Modulus, measured by micro-indentation through thickness of joints, in black-filled IR, (4) 701
Moriyama sheeter, for rubber mills, (abs-F98#71) (1) 246
Morphology and rheology, of nylon 6–PP blends with varying interfacial reaction, (abs-F98#61) (1) 243
Morphology, of in situ silica, effect on mechanical properties of NBR matrix, (1) 119
Multiple cracking and grinding, of polymeric materials, high-temperature shear-indeced, (abs-F98#41) (1) 236

NBR, dynamic mechanical analysis on reinforced compounds over wide temperature range, (abs-S99#27) (4) 788
NMR relaxation studies, of cured NR with carbon black fillers, (1) 1
NMR spectroscopy, pulsed, for determining oil in SBR, (abs-S99#19) (4) 785
NR latex films, radiation vulcanized, effect of water soluble polymers on, (2) 308
NR, and blends with BR, cut growth study and cracking patterns, (5) 895
NR, and blends with BR, cut growth study and cracking patterns, (abs-S99#18) (4) 785
NR, gum and black-filled, tensile behavior after oxidative aging, (4) 721
NR, highly deproteinized, thermal properties and crystallization behavior, (1) 174

NR, peroxide curing with diallyl phthalate coreagent, studied by spectroscopic methods, (2) 334
NR, reversion studied by Fourier transform Raman spectroscopy, (5) 829
NR, skim, deproteinized, and pale crepe, compared as to crystallization and strength, (abs-S99#17) (4) 785
NR, thermochemical recycling with disulfides, through main chain scission, (abs-F98#57) (1) 242
NR, thermochemical recycling with disulfides, mechanism, (4) 731
Nickel octoate/triisobutylaluminum/HF catalyst, for improved processing BR, (abs-S99#3) (4) 780
Noise reduction, in synchronous drive belts, by use of helical offset teeth, (abs-S99#55) (4) 796
Norsorex® PNR for paper feed rollers, (abs-F98#44) (1) 237
Nucleation, of blends of high molecular weight polyolefins, (abs-S99#15) (4) 784
Nylon 6–PP blends, with varying extents of interfacial reactions, morphology and rheology of, (abs-F98#61) (1) 243

O-rings, performance as affected by stresses, (abs-S99#56) (4) 796
Oil, in SBR, determining by pulsed NMR, (abs-S99#19) (4) 785
Opacity, in rubber, crack-induced, as a means of detecting ozone, (4) 769
Orientation texture, and gas transport in semicrystalline block copolymer blends of E/EP with PE and IR, (abs-F98#51) (1) 239
Oxidative aging, effect on tensile of SBR and NR, (4) 721
Ozone detection, by crack-induced opacity in rubber, (4) 769
Ozone resistance, of blends of BIMS/NR, (abs-S99#64) (4) 799

PDMS (Polydimethyl siloxane), for elastomeric modification of silica gels, (1) 130
PDMS, reacted with zeolites in two ways and compared for reinforcing ability, (1) 138
PET (polyethylene terephthalate) blend with PP, compatibilized with PP-GMA, (abs-F98#60) (1) 243
PIB-PS multi-arm star TPE, made by use of hexepoxyqualene initiator, synthesis and characterization, (4) 559
PIB/PS multiarm star polymers, made using hexafunctional initiator with $TiCl_4$, (abs-F98#81) (1) 248
PMMA (acrylic rubber), covalently attached to polyester backbone to give optically clear, tough films, (abs-F98#88) (1) 250
PNR (Polynorbornene rubber), for paper feed roller application, (abs-F98#44) (1) 237
PP, maleated to different extents, blended with nylon 6, (abs-F98#61) (1) 243
PP, with variable isotacticity, prepared using unsymmetric zirconium catalyst, (abs-F98#7) (1) 227
PVC, blends with SBR crosslinked by DVB, (abs-F98#95) (1) 251
PVC/NBR alloys, tailor-made TPEs, properties of, (abs-F98#94) (1) 251
PVC/polyester urethane blends and phase behavior of fibers formed, (abs-F98#62) (1) 243
PVC/polyester urethane blends and phase behavior of fibers formed, (4) 587
Pale crepe, crystallization behavior and strength, (abs-S99#17) (4) 785
Paper feed roller, of polynorbornene rubber, (abs-F98#44) (1) 237
Papermill roll coverings, of high hardness compounds, (abs-S99#25) (4) 787
Perkalink 900: 1,3-bis(citraconimidomethyl)benzene, anti-reversion agent, (abs-F98#17) (1) 229
Permeation, of organic liquids through rubber membranes, effect of gasoline, (4) 758
Peroxide curing, of NR/diallyl phthalate blends, studied by spectroscopy, (2) 334
Peroxide, formulating EPDM with vinyl norbornene to decrease amount needed, (abs-S99#33) (4) 789
Phase behavior of BIMS in blends with NR, (5) 910
Phase mixing, of BIMS with precipitated silica for better tire tread, (abs-S00#32) (4) 789
Plasma polymerization, for modifying surface of textile tire cords to improve adhesion, (abs-S99#62) (4) 798
Plasma polymerized acetylene, as primer for adhesion of NR to steel, (1) 199
Polar association, in polyethylacrylate, at small shear and large elongation, effect of polar solvent, (abs-F98#22) (1) 231
Polyactide-containing block copolymers, design, synthesis and characterization, (abs-F98#78) (1) 247
Polyester fiber, with high modulus, low shrinkage core and fusible PBT sheath, for transmission belting, (abs-F98#29) (1) 233
Polyester melt phase chemistry, as related to physical properties, (abs-F98#84) (1) 249
Polyester processing, to give strain-induced crystallization affecting final properties, (abs-F98#85) (1) 249
Polyesteramides, segmented, from *N*, *N'*-bis(*p*-carbomethoxybenzoxy)diamine and poly(tetramethylene oxide), (abs-F98#87) (1) 249
Polyesters, containing aromatic dicaroxylic acids, structure/property relationships, (abs-F98#86) (1) 249
Polyesters, with dissimilar chains, synthesized from macromolecules with diol at single chain end, (abs-F98#88) (1) 250
Polyester urethane elastomer blended with rigid PVC, fiber formation and phase behavior, (abs-F98#62) (1) 243

Polyester urethane elastomer blended with rigid PVC, fiber formation and phase behavior, (4) 587
Polyetherimide blends, miscibility and melt processing, (abs-F98#59) (1) 242
Polyethylacrylate, polar association at small shear and large elongation, effect of polar solvent, (abs-F98#22) (1) 231
Polymer and clay surfaces, modeling interaction between, (abs-F98#75) (1) 247
Polymer blend processing, in situ visualization of viscosity ratio and surface influence, (abs-S99#29) (4) 789
Polyolefin elastomers, containing reactive *p*-methylstyrene units, made by using metallocene catalysts, (abs-F98#5) (1) 226
Polyolefin elastomers, containing reactive *p*-methylstyrene units, (2) 283
Polyolefins, blend of high molecular weight polymers, nucleation studied, (abs-S99#15) (4) 784
Polyolefins, welding with the Emabond® Process, (abs-F98#93) (1) 251
Polystyrene-*b*-polyisobutylene arms on polydivinylbenzene core, star block polymer, properties of, (abs-F98#79) (1) 247
Polyurethane elastomers, evaluated for sealing applications in gas-distribution, (abs-S99#57) (4) 797
Polyurethane rolls, produced by ribbon flow process, (abs-S99#26) (4) 788
Polyurethane rubber, chemistry of, (abs-S99#45) (4) 793
Polyurethane rubbers, blended with conventional rubbers, (abs-S99#46) (4) 794
Polyurethanes, stabilized by oligomeric carbodiimides, (abs-S99#47) (4) 794
Power steering hose, crimping stress and pulsation noise attenuation, related to composite construction and material, (abs-S99#36) (4) 791
Predictive fracture mechanics, for tires, (abs-S99#41) (4) 792
Printing, using rubber rollers, (abs-S99#23) (4) 787
Processability, of SBC compounds, by design, (abs-F98#91) (1) 251
Processing changes, in handling polyesters, and resulting properties, (abs-F98#85) (1) 249
Protective clothing, from TPEs, (abs-S99#78) (4) 803
Pulsation noise attenuation, in power steering hose, (abs-S99#36) (4) 791
Pulverization, of rubber particles, by solid state shear extrusion, (abs-S99#85) (4) 805

QSPR (quantitative structure–property relationships) studies, of SBR vulcanization with sulfur, (2) 318
Quality assurance, a tool for interlaboratory testing of rubber, (abs-S99#9) (4) 782
Quality control, of discontinuous compounding process in a rubber internal mixer, (abs-S99#6) (4) 781
Quality control, through dynamic testing of EPDM polymers and compounds, (abs-F98#21) (1) 230
Quality management, evolution of, (abs-S99#8) (4) 782

Radiation vulcanized NR latex film, effect of water soluble polymers on, (2) 308
Radiator hose, EPDM, peroxide curing of, (abs-F98#42) (1) 236
Reaction Stage Modeling, for studying role of zinc catalysts in accelerated vulcanization, (1) 43
Recycled rubber, for light fill, from tire scrap, (abs-S99#86) (4) 806
Recycling technology, continuous, for vulcanized rubber, (abs-S99#84) (4) 805
Recycling, of NR and EPDM with disulfides, mechanism, (4) 731
Recycling, of NR and EPDM, mechanisms involved, (abs-F98#57) (1) 242
Transition metal compound/methylaluminoxane catalysts, for polymerization of BR, IR and SBR, and SIR, (abs-S99#2) (4) 779
Recycling, of automotive parts made of TPEs, (abs-F98#37) (1) 235
Recycling, of tires, ustilization of materials, (abs-F98#56) (1) 241
Regression and neural networks process models, for on-line characterization of viscoelasticity, (abs-S99#6) (4) 781
Reinforced polymer composites, (abs-F98#76) (1) 247
Reinforcement, by carbon black related to surface structure, (5) 929
Reinforcement, of SBR and NR by carbon black, mechanism, (5) 946
Reinforcement, of elastomers, by silica generated in situ, (abs-S99#14) (4) 784
Reversion resistance, in aircraft tires, improved by use of two agents, Perkalink 900 and Activator 73, (abs-F98#17) (1) 229
Reversion, effect of zinc complexes on crosslink degradation, (1) 27
Reversion, of NR, studied by Fourier transform Raman spectroscopy, (5) 829
Rheological properties, of uncured black-filled rubber, bound rubber as a key to understanding, (abs-S99#70) (4) 801
Rheology, of EPDM, checking consistency in production, (abs-S99#5) (4) 781
Rheology, of polymer solutions at zero shear conditions, (abs-F98#26) (1) 232
Ribbon Flow Process, for producing urethane-covered rolls, (abs-S99#26) (4) 788
Road tracks, effect of fractal dimensions and correlation lengths parallel and normal to surface, (abs-S99#43) (4) 793

Rodan devulcanizing extruder, for reclaiming rubber from bushings and bumpers, (abs-F98#54) (1) 241
Rollers, rubber, for today's printing process, (abs-S99#23) (4) 787
Rubber-to-fiber adhesive, from maleinized BR latex, (abs-S99#51) (4) 795
Rubber-to-metal bonding, using silanes, (abs-S99#60) (4) 798
Rubber Division, ACS, Program for 1999 Spring Meeting, (2) G14
Rubber Division, ACS, Best Paper Awards, Fall 1998, (4) G57
Rubber Division, ACS, Chairman, 1999, Donald E. Mackey, (1) G2
Rubber Division, ACS, Charles Goodyear Medal, 1999, James E. Mark, (3) G49
Rubber Division, ACS, Instructions to contributors, (3) G43
Rubber Division, ACS, Melvin Mooney Distinguished Technology Award, 1999, to A. I. Isayev, (3) G45
Rubber Division, ACS, Sparks–Thomas Award, 1999, to Anthony J. Dias, (3) G47
Rubber Division, ACS, new editor for *Rubber Chemistry and Technology*, Frederick Ignatz-Hoover, (5) G64
Rubber blends, distribution of carbon black in, (1) 91
Rubber blocks, compressed or bent, surface instabilities in, (2) 253
Rubber cylinders, determining energy through FEA, (abs-S99#37) (4) 791
Rubber elasticity, development of constitutive model by comparing several models for, (abs-S99#21) (4) 786
Rubber friction, on self-affine road tracks, (abs-S99#43) (4) 793
Rubber mixtures, miscible, component dynamics in when diluents are of higher T_g, (abs-F98#35) (1) 234
Rubber process analyzer, viscous heating and reinforcement effects of fillers, (abs-S99#7) (4) 781
Rubber-covered rollers, Chemlok® adhesives and how they are used, (abs-S99#24) (4) 787
Rubber sheet preforming machine, for continuous operation in the mill room, (abs-F98#71) (1) 246
Rubber trees, analysis of gel fraction in latex from virgin trees, (2) 299

SBC (styrene block copolymers), designed processability for, (abs-F98#91) (1) 251
SBR and SIR, made using traansition metal/methylaluminoxane catalysts, (abs-S99#2) (4) 779
SBR vulcanizate, black-filled, ground and added to original uncured compound, effect on tensile and tear tests, (abs-F98#53) (1) 240
SBR, gum and black-filled, tensile behavior after oxidative aging, (4) 721
SBR, on-line characterization of viscoelastic properties, (abs-S99#6) (4) 781
SBR, thermochemical recycling with disulfides, mechanism, (4) 731
SBR, tracing chemorheology from green to cured state, (2) 361
SBR, ultrasonic treatment, continuous, effect of styrene content, (abs-F98#55) (1) 241
SBR, vulcanization with sulfur, studied by QSPR, (2) 318
SBR/PVC/NBR blends, optimizing properties of, (abs-F98#95) (1) 251
SBS thermoplastic elastomers, cut growth of, (abs-S99#77) (4) 803
STXM (scanning transmission electron microscopy), for chemically sensitive imaging of tire blends, (abs-S99#30) (4) 789
SUNIGUM®, acrylate terpolymer elastomer for heat and UV stable polymer/plastic blends, (abs-F98#94) (1) 251
Sample holder, for measuring interfacial properties of BIMS and BR, (abs-F98#77) (1) 247
Schallamach, Adolf, International Rubber Science Hall of Fame Inductee, biographer, (2) G31
Scrap rubber, from latex or crumb, for truck tire retreads, (abs-F98#31) (1) 233
Seals, of EPDM sponge, for automotive industry, optimizing production of, (abs-S99#69) (4) 800
Self consistent field theory, for modeling interactions between polymers and clay surfaces, (abs-F98#75) (1) 247
Semi-efficient vulcanization, with efficient antidegradants, for improving durability of truck tires, (abs-S99#61) (4) 798
Shearographic tire inspection, (abs-S99#44) (4) 793
Silanes, in bonding of rubber to metal, (abs-S99#60) (4) 798
Silanes, with di- and polysulfane functions, studied in model systems and in rubber to see reactivity of sulfur function, (abs-S99#74) (4) 802
Silica and carbon black, comparison as loading in tire tread in terms of time–temperature superposition of loss tangent, (abs-F98#15) (1) 229
Silica dispersion aid, used with silane coupler for improved processing of silica-loaded tread compounds, (abs-F98#18) (1) 230
Silica reinforcement, of NBR in situ, with silane coupling agent, (1) 119
Silica xerogels, modification on a micro- and nano-scale by elastomers for insulants, (1) 130
Silica, fumed, with high reinforcing and low thickening properties, (abs-F98#13) (1) 228
Silica, generated in situ, for reinforcement of general purpose elastomers, (abs-S99#14) (4) 784
Silica, importance of silanol group density, particle size distribution, surface activity on reinforcement of tires, (abs-S99#73)

(4) 802
Silicone rubber, continuous ultrasonic devulcanization, (1) 152
Silicone rubber, liquid, faster curing and requiring no post cure, (abs-F98#12) (1) 228
Silicone rubber, measuring processing and dynamic property performance, (abs-F98#10) (1) 227
Skim rubber, crystallization behavior and strength, (abs-S99#17) (4) 785
Slip, in conveyor systems, predicting, (3) 484
Soviet-block countries, doing business with, (abs-S99#87) (4) 806
Specialty elastomers, for sealing applications in gas-distribution, (abs-S99#57) (4) 797
Specific discharge capacity, parameter for use in wet traction testing of tires, (4) 684
Stabilizing polyurethanes, with oligomeric carbodiimides, (abs-S99#47) (4) 794
Star block polymers, of polystyrene-*b*-polyisobutylene arms on polydivinylbenzene core, (abs-F98#79) (1) 247
Star polymer, multi-arm, from PIB and PS using hexaepoxy squalene initiator, characterization, (4) 559
Star polymers, multiarm, from PIB/PS, made using hexafunctional initiator with $TiCl_4$, (abs-F98#81) (1) 248
Stearic acid, influence in mixing of silica-filled tire tread compound, (abs-F98#19) (1) 230
Steel, aluminum, and brass, bonded to rubber by mixture of silanes in one step, (abs-S99#60) (4) 798
Strain dependent dynamic properties, of filled rubber, non-linear viscoelastic approach to, (2) 419
Strain energy release rates, in rubber, studied by FEA, (abs-F98#2) (1) 225
Stress–strain curve, of elastomers, theory of, (abs-F98#1) (1) 225
Stress-induced phenomena, in elastomers, and influence on design of O-rings, (abs-S99#56) (4) 796
Stresses, in conveyor systems, predicting, (3) 484
Styrene/isoprene/butadiene terpolymer, for high performance tires, (abs-S99#1) (4) 779
Styrenic block copolymers, for use in asphalts and adhesives, (abs-F98#83) (1) 249
Sulfur vulcanization, of SBR, quantitative structure–property relationships studies, (2) 318
Surface instabilities, in compressed or bent rubber blocks, (2) 253
Surface morphology, of thermal carbon blacks, (abs-S99#71) (4) 801
Surface oxidation, of carbon black, effect on its bonding with epoxidized NR, (2) 398
Surface structure, of carbon black in relation to its reinforcing effect, (5) 929
Swelling, of elastomers in mixed solvents, (1) 74
Symar-D, processable, revulcanizable product of coarse tire rubber crumb, (abs-F98#40) (1) 236
Synergy blends, of SBC, polyolefins, and polyolefin elastomers, (abs-F98#91) (1) 251

TAPDT (2,4,6-tris-(*N*-1,4-dimethylpentyl-*p*-phenylene diamine), for long-term static ozone crack resistance of tires, (abs-S99#65) (4) 799
TBBS (2-*t*-butylbenzothiazole sulfenamide), reactions with sulfur and zinc oxide in the absence of rubber, (1) 55
TBBS, accelerator for sulfur vulcanization of IR, (1) 65
TEOS (tetraethoxysilane), for in situ silica filling of NBR, (1) 119
TESPD bis(3-triethoisilylpropyl)disulfane, reactivity of sulfur function studied, (abs-S99#74) (4) 802
TESPT bis(3-triethoxisilylpropyl)tetrasulfane, reactivity of sulfur function studied, (abs-S99#74) (4) 802
TOF-SIMS (Time of Flight-Secondary Ion Mass Spectrometry), for detecting surface groups on carbon black, (2) 384
TPE, from star block polymer of polystyrene-*b*-polyisobutylene arms radiating from polydivinylbenzene core, (abs-F98#79) (1) 247
TPEs (thermoplastic elastomers), role in recycling automotive parts, (abs-F98#37) (1) 235
TPEs, an overview and review, (abs-F98#64) (1) 244
TPEs, future markets, (abs-F98#65) (1) 244
TPEs, based on blends of PVC and DVB-crosslinked SBR, (abs-F98#95) (1) 251
TPEs, for automotive applications, (abs-F98#90) (1) 250
TPEs, influence of injection speeds and plaque thickness on physical properties, (abs-F98#68) (1) 245
TPEs, injection molded with rubber and LSR, (abs-S99#80) (4) 804
TPEs, of segmented copolymers with disperse amide units, (abs-F98#87) (1) 249
TPEs, styrenic block copolymers, for use in asphalts and adhesives, (abs-F98#83) (1) 249
TPEs, welding with the Emabond® Process, (abs-F98#93) (1) 251
TPV, for high pressure hose, (abs-F98#67) (1) 245
TPVs (thermoplastic vulcanizates), non-hygroscopic, with better colorability, (abs-F98#66) (1) 245
Tackifying resins, identification in cured rubber, (1) 181
Tearing energy parameter, and relation to fatigue crack growth in rubber, (abs-S99#20) (4) 786
Temperature dependence, of storage modulus of filled rubber composite, (4) 657

Temperature effects, on blends of NBR and XNBR, studied at different strains, (abs-S99#27) (4) 788
Tensile and tear strength, effect of adding ground vulcanizate to original uncured compound, (abs-F98#53) (1) 240
Tensile and tear strength, of SBR products containing ground black-filled SBR vulcanizate, (2) 357
Tensile behavior, after oxidative aging, of SBR and NR, (4) 721
Tensile specimens, containing spherical rubber inclusion, mode of failure, (abs-S99#75) (4) 803
Tetraethoxysilane, sol–gel reactions in ENR, SBR, BR to generate silica in situ, (abs-S99#14) (4) 784
Thermal analysis techniques, for determining glass transition temperature of elastomers, (3) 513
Thermal methods, for identifying tackifying and reinforcing resins in cured rubber, (1) 181
Thermal properties, of deproteinized NR, (1) 174
Thermodynamic interactions, of blends of BR and IR, (abs-F98#34) (1) 234
Thermodynamic interactions, of blends of BR and IR, (4) 580
Thiuram accelerators, monosulfide and disulfide, for tires, effect on durability, (abs-S99#63) (4) 799
Thiurams, different behaviors in EPDM, (abs-F98#25) (1) 232
Tire black sidewall, effect of BIMS structure on properties of, (abs-F98#49) (1) 239
Tire black sidewall, long term static ozone crack resistance by use of 77PD or TAPDT, (abs-S99#65) (4) 799
Tire blends, chemically sensitive imaging using scanning transmission X-ray microscopy, (abs-S99#30) (4) 789
Tire carcasses, choice of materials for maximum durability, (abs-S99#59) (4) 797
Tire compounds, using blend of immiscble polymers with diblock copolymer compatibilizer, (abs-S99#28) (4) 788
Tire cords, surface modification by plasma polymerization for improved adhesion, (abs-S99#62) (4) 798
Tire durability, as affected by different thiuram accelerators, (abs-S99#63) (4) 799
Tire inspection, by advanced shearography, (abs-S99#44) (4) 793
Tire scrap, coarse rubber crumb, thermo-mechanically reactivated into reusable product, (abs-F98#40) (1) 236
Tire scrap, environmental effects in light fill applications, (abs-S99#86) (4) 806
Tire scrap, physico-chemical changes during devulcanization of, (abs-F98#58) (1) 242
Tire sections, studied by evanescent microwave probes of ultra-high resolution, (abs-S99#40) (4) 792
Tire tread particles, quantifying amount in environment using extractable zinc as tracer, (5) 969
Tire tread, comparison of silica and carbon black loading in terms of time–temperature superposition of loss tangent, (abs-F98#15) (1) 229
Tire tread, made from phase mixing of BIMS with precipitated silica, (abs-S00#32) (4) 789
Tire treads, containing silica-treated carbon black, (abs-S99#72) (4) 802
Tires, automatic inspection by X-ray, (abs-S99#42) (4) 793
Tires, cap tread compound based on new arrangement of filler–gel/rubber matrix system, (4) 657
Tires, durability, influence of compounding ingredients, (abs-S99#59) (4) 797
Tires, from new type of silica-filled ESBR containing blend of low- and high-molecular weight polymers, (abs-S99#13) (4) 783
Tires, high performance, from styrene/isoprene/butadiene terpolymers, (abs-S99#1) (4) 779
Tires, importance of analytical properties of silica used in reinforcement, (abs-S99#73) (4) 802
Tires, predicting fracture mechanics during design, (abs-S99#41) (4) 792
Tires, recycling and utilization of materials, (abs-F98#56) (1) 241
Tires, truck, increasing durability through compound modification, (abs-S99#61) (4) 798
Tires, wet traction improved by mineral fillers, (5) 960
Topology, of elastomer/rubber wear particles, (2) 343
Traction, wet, influenced by tread groove void and aspect ratio, (4) 684
Tread groove void, and developed tread width, joint influence on wet traction, (4) 684
Triboelastic solid, 3-constant standard, used in modeling carbon black filled NR vulcanizate, (4) 673
Truck tire retreads, using scrap based on latex and crumb products, (abs-F98#31) (1) 233
Truck tires, radial steel-belted, studied by Acousto-Ultrasonic method, (abs-S99#39) (4) 792

Ultrasonic degradation of rubber, establishing a model involving acoustic cavitation, (abs-F98#38) (1) 235
Ultrasonic degradation, of rubber, model using acoustic cavitation of viscoelastic solids, (4) 741
Ultrasonic treatment, of uncured and sulfur cured SBR, effect of styrene content, (abs-F98#55) (1) 241
Ultrasound, for devulcanization of guayule, (5) 854

V.O.C. (volatile organic compound) compliant flock adhesive, from high solid EPDM rubber, (abs-S99#58) (4) 797
Vanadium based catalysts, for producing EPDM with consistent rheology, (abs-S99#5) (4) 781
Vinyl norbornene, used in EPDM formulation to reduce peroxide content, (abs-S99#33) (4) 789

Viscoelastic behavior, of blends of emulsion SBR with different molecular weights, (abs-S99#11) (4) 783
Viscoelastic properties of filled rubber, and characteristics of filler–gel, (abs-F98#14) (1) 229
Viscoelastic properties of filled rubber, and characteristics of filler–gel, (4) 657
Viscoelastic properties, of NBR and XNBR, studied over wide temperature and strain frequency range, (abs-S99#27) (4) 788
Viscoelasticity, phenomenological model, for filler-loaded vulcanizates under dynamic loads, (2) 419
Viscosity, of EVM, enhancing for general purpose molded and extruded applications, (abs-F98#43) (1) 237
Viscous heating, and reinforcement effects, of fillers using rubber process analyzer, (abs-S99#7) (4) 781

Water soluble polymers, effect on properties of radiation vulcanized NR latex films, (2) 308
Wear particles, influence of grit size, slip rate, contact length, (2) 343
Weatherstrip flock adhesive, V.O.C. compliant, from EPDM, (abs-S99#58) (4) 797
Welding, of polyolefins and TPEs, using an electromagnet interlayer and induction heating, (abs-F98#93) (1) 251
Wet traction, of tires, improved by mineral fillers, (5) 960
Wire adhesion promoter, (abs-F98#27) (1) 232
Wire adhesion, improving by use of polymer blends, (abs-F98#63) (1) 244

X-ray inspection, of tires, automatic, (abs-S99#42) (4) 793
X-ray microscopy, scanning transmission, for chemically sensitive imaging of tire blends, (abs-S99#30) (4) 789
XNBR, dynamic mechanical analysis on reinforced compounds over wide temperature range, (abs-S99#27) (4) 788
XPS (X-ray Photoelectron Spectroscopy), for detecting surface groups on carbon black, (2) 384

ZDEC bis(diethyl-dithiocarbamato)zinc(II), role in cross-link desulfuration, (1) 43
ZDEC bis(diethylsdithiocarbamato)zinc(II), catalyst for degradation of mono- and disulfidic crosslinks, (1) 27
ZDMC bis(dimethyldithiocarbamato)zinc(II), catalyst in accelerated vulcanization, (1) 15
ZMBT bis(mercaptobenzothiazolato)zinc(II), catalyst in accelerated vulcanization, (1) 15
Zeolites, for reinforcing PDMS by forcing elastomer chains through silica cavities, (1) 138
Zero shear viscosity, related to temperature, polymer molecular weight and concentration, (abs-F98#26) (1) 232
Zinc, extractable, in detecting amounts of tire-tread particles in the air, (5) 969
Zirconium catalysts, unsymmetric, for preparation of PP with variable isotacticity, (abs-F98#7) (1) 227
Zn-EMA [zinc salt of poly(ethylene-*co*-methacrylic acid)], in elastomeric blend with Zn-XNBR, (2) 449
Zn-XNBR (zinc salt of carboxylated NBR) in elastomeric blend with Zn-EMA, (2) 449